

DOCUMENT RESUME

ED 277 587

SE 047 689

**TITLE** Water Quality Instructional Resources Information System (IRIS): A Compilation of Abstracts to Water Quality and Water Resources Materials, Supplement 27, 1986.

**INSTITUTION** Ohio State Univ., Columbus, Ohio. Information Reference Center for Science, Mathematics, and Environmental Education.

**PUB DATE** Oct 86

**NOTE** 156p.

**AVAILABLE FROM** SMEAC Information Reference Center, The Ohio State University, 1200 Chambers Rd., 3rd Floor, Columbus, OH 43212 (U.S. subscription, \$12.00; \$5.00 each).

**PUB TYPE** Reference Materials - Bibliographies (131)

**EDRS PRICE** MF01/PC07 Plus Postage.

**DESCRIPTORS** \*Audicvisual Aids; Citizen Participation; Environmental Education; Hazardous Materials; Indexes; Information Dissemination; \*Instructional Materials; Pesticides; Postsecondary Education; Sludge; Technology; Waste Disposal; \*Waste Water; Water; Water Pollution; \*Water Quality; \*Water Resources; \*Water Treatment

**ABSTRACT**

Compiled are abstracts and indexes to selected print and non-print materials related to wastewater treatment and water quality education and instruction, as well as materials related to pesticides, hazardous wastes, and public participation. Sources of abstracted/indexed materials include all levels of government, private concerns, and educational institutions. Title, author(s), publication date, descriptors, descriptive notes, and availability information are provided for each entry. Procedures are outlined by which instructors and curriculum developers in the water quality control field can locate instructional materials to meet general or highly specific requirements of their programs. Also included are an author and subject index. This publication supplements and does not replace "Water Quality Instructional Resources Information System (IRIS): A Compilation of Abstracts to Water Quality and Water Resources" or IRIS Supplements 1-26. (ML)

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TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)."

# Water Quality Instructional Resources Information System

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5E047 699

IRIS



Prepared by

Environmental Quality Instructional Resources Center  
SMEAC Information Reference Center  
The Ohio State University  
1200 Chambers Road, Room 310  
Columbus, OH 43212

WATER QUALITY INSTRUCTIONAL  
RESOURCES INFORMATION SYSTEM (IRIS)

A Compilation of Abstracts to  
Water Quality and Water Resources Materials

Supplement 27, 1986

October, 1986

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## Preface

This publication contains abstracts and indexes to selected materials related to wastewater treatment and water quality education and instruction. In addition, some materials related to pesticides, hazardous wastes, and public participation are included. Also included are procedures to illustrate how instructors and curriculum developers in the water quality control field can locate instructional materials to meet very general or highly specific requirements in their programs.

Supplements to this publication will be issued periodically.

For further information about these materials contact:

Environmental Quality Instructional Resources Center  
1200 Chambers Road, Room 310  
Columbus, Ohio 43212

(614) 422-6717

## I. General Information about Materials in IRIS.

### A. What types of materials are included in IRIS?

The Environmental Quality Instructional Resources Center acquires, reviews, indexes, and announces both print (books, modules, units, etc.) and non-print (films, slides, video tapes, etc.) materials related to water quality and water resources education and instruction.

Materials selected must be available from some source for announcement. When materials are not readily available we attempt to make the materials available through some national information service for easier acquisition. In a few cases the Environmental Quality Instructional Resources Center is the source of the materials.

### B. How are materials entered into IRIS?

We request that people assist us in locating materials for the system. If you have materials you believe to be useful to others, please send two copies if possible to the:

Environmental Quality (EQ) Instructional Resources Center  
1200 Chambers Road, Room 310  
Columbus, Ohio 43212

Materials are reviewed by the project staff. Availability of the materials is checked, and the materials are abstracted and indexed. The abstract describes the contents of the material. The index terms (descriptors) are concepts or terms used to describe the contents and the form of the document. (See the Subject Index for a listing of those that have been used.) The index terms are useful for locating materials manually, such as with this supplement, and also by computer.

When items are processed they are entered on the IRIS (water) computer tape. This tape is maintained by the EQ Instructional Resources Center at The Ohio State University and is used for producing tapes for other information systems, publications, and for computer searches conducted at The Ohio State University.

### C. How can a user locate materials in IRIS?

#### 1. All materials placed in IRIS (water) collection.

Materials entered into the IRIS (water) collection can be located in two ways: (1) by manual search of the 1983 compilation and supplements that follow and (2) by computer.

The compilation produced in 1983 includes the original IRIS (1979) and Supplements 1-15. It is available for \$75.00.

Quarterly updates of the compilation are available by subscription on a yearly basis. Information regarding an annual subscription to IRIS (water) Quarterly Compilations can be obtained by writing to the EQ Instructional Resources Center. A subscription to the quarterly supplements for 1985 is \$12.00 (within the U.S.). Price to Canada and Mexico is \$14.00. Prices in other Countries is \$18.00. Separate quarterly supplements are \$5.00 each.

The compilation and the quarterly supplements can be scanned and the subject index can be used for manual searches.

Computer tapes of the IRIS (water) collection can also be searched. The IRIS tapes are available for searching at The Ohio State University and will again be available for computer searching at other sites in the future.

## 2. Materials placed in the Educational Resources Information System (ERIC)

A number of the materials processed for the IRIS (water) system are entered into the ERIC system and announced in Resources in Education (RIE). Resources in Education (RIE) is published monthly and is available from:

Superintendent of Documents  
U.S. Government Printing Office  
Washington, DC 20402  
(202) 783-3238

The current price is listed in the most recent issue of RIE. Check if a college or university library close to you has a copy. If they do not, contact the EQ Instructional Resources Center for assistance.

Many libraries subscribe to RIE. Materials announced in RIE can be searched manually each month by scanning RIE or by checking the index terms in the back of each issue. Materials announced in RIE can be searched by computer also. ERIC computer tapes may be purchased outright, but users can access them through Dialog, BRS, CompuServe and Systems Development Corporation (Orbit). For the address of search services in your state that can search these databases, contact the:

EQ Instructional Resources Center  
1200 Chambers Road, Room 310  
Columbus, Ohio 43212  
(614) 422-6717

Most of the materials announced in RIE are available on microfiche (microfilm) at over 700 sites throughout the United States and the world. Users can view these materials on site at many locations to identify what they believe will be useful to them at no cost. Microfiche copies (or in most cases Xerox copies) can be ordered through the ERIC Document Reproduction Service. The address and order information is in the back of each issue of RIE. Xerox copies of many items related to water quality and resource education and training can also be ordered through the EQ Instructional Resources Center for \$0.06 per page plus \$1.00 per document.

For information about locations of ERIC microfiche sites in your state, contact the EQ Instructional Resources Center.

A number of journal articles processed for the IRIS (water) system are entered into the ERIC system and announced in Current Index to Journals in Education (CIJE).

Current Index to Journals in Education is published monthly and is available from:

ORYX Press  
2214 North Central at Encanto  
Phoenix, Arizona 85004  
(602) 254-6156

Many libraries subscribe to CIJE. Materials announced in CIJE can be searched manually each month by scanning CIJE or by checking the index terms in the back of each issue. Materials announced in CIJE can be searched by computer also. Refer to the previous discussion of RIE concerning computer searches.

Materials announced in CIJE can be located in journals at many university libraries.

Many of the articles can be obtained from University Microfilms. For prices and further information write to:

UUMI Article Reprint Department  
300 North Zeeb Road  
Ann Arbor, Michigan 48106  
(800) 521-0600

## II. How to Use the Compilation

### A. Description of Information in Resumes

Each resume is listed by EW number in numerical order in the resume section. Two samples of resumes are provided to explain the data fields in the resumes. Sample resume #1 is a sample resume of an item not entered into ERIC. Sample resume #2 is a sample resume of an item entered into ERIC; a few additional data elements are in these resumes and are explained.

#### 1. Sample resume of materials not entered in ERIC

- a. IRIS NUMBER: EW006023
- b. PUBLICATION DATE: FEB 81
- c. TITLE: PROGRAMMED APPROACH TO WATER/MASS ANALYSES.
- d. PERSONAL AUTHOR: SPENCE, GEORGE R., JR.
- e. DESCRIPTOR: \*DESIGN; \*ENGINEERING; \*EQUIPMENT; \*MASS BALANCE; \*PROJECT DESIGN; \*POLLUTION ENGINEERING; \*PIPES; \*WATER RESOURCES
- f. DESCRIPTIVE NOTE: 30-33P.
- g. ABSTRACT: DURING THE ENGINEERING PHASE OF A PROJECT DESIGN, WATER REQUIREMENTS OFTEN CHANGE AS NEW INFORMATION BECOMES AVAILABLE. THIS ARTICLE DETAILS A PROGRAMMED APPROACH TO CALCULATION OF A WATER/MASS BALANCE WHICH PROVIDES THE USER WITH THE ABILITY TO READILY ASSESS THE IMPACT OF VARYING WATER QUALITIES, FLOW PATTERNS, AND FLOW RATES. THIS INFORMATION IS THEN USED IN DETERMINING PIPE AND EQUIPMENT SIZES.
- h. AVAILABILITY: POLLUTION ENGINEERING; V13 N2
  - a. IRIS NUMBER -- this is the identification number sequentially assigned to materials as they are processed. Gaps in numbers mean that some items have been deleted, are being processed to add new information, or have been delayed in processing for some reason.
  - b. PUBLICATION DATE -- date material was published according to information on the material.
  - c. TITLE
  - d. PERSONAL AUTHOR -- person or persons who wrote, compiled, or edited the material. Up to two personal authors can be listed.
  - e. DESCRIPTOR -- subject terms which characterize substantive contents and form of the materials. The major terms are preceded by an asterisk. Terms used to index all resumes in this compilation can be reviewed in the Subject Index.

- f. DESCRIPTIVE NOTE -- various items of information may be contained in this section. For print materials the number of pages is usually listed. The price of the material quoted is the last time information was received from the source. Please note: Prices of nearly all materials are subject to changes and may not be accurate at the time a person orders a specific item.
- g. ABSTRACT -- some early materials entered into IRIS did not have abstract information. All materials currently being entered into IRIS have an informative abstract that describes the contents of the item.
- h. AVAILABILITY -- information in this field indicates where the material can be obtained.

2. Sample resume of material entered into ERIC (Resources in Education).

Items entered into ERIC (Resources in Education) will have a few additional data fields. See letter references "a" and "b" below.

IRIS ACCESSION NUMBER: EW006664  
PUBLICATION DATE: 80  
TITLE: RESOURCE DEVELOPMENT OF WATERSHED LANDS: A SIX WEEK SHORT COURSE.  
DESCRIPTOR: ADMINISTRATION; ECOLOGICAL FACTORS; ECONOMIC FACTORS; INSTRUCTIONAL MATERIALS; \*LAND USE; NATURAL RESOURCES; \*POST SECONDARY EDUCATION; \*TECHNICAL EDUCATION; \*WATER RESOURCES; HYDROLOGY; NATURAL RESOURCES MANAGEMENT; WATER QUALITY; \*WATERSHEDS

b. DESCRIPTIVE NOTE: EDRS PRICE: MF01 PLUS POSTAGE-NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT.

ABSTRACT: THIS COURSE WAS DESIGNED TO PROVIDE THE WATER RESOURCE TECHNICIAN OR MANAGER WITH INFORMATION WHICH WILL AID IN THE IMPLEMENTATION OF IMPROVEMENTS OF PRESENT LAND USE PRACTICES AND TO ILLUSTRATE ALTERNATIVE CONCEPTS AND TECHNIQUES IN LAND AND WATER USE FOR INCREASING AND IMPROVING THE MULTIPLE PRODUCTS OF WATERSHED LANDS. (ED 197 941)

a. AVAILABILITY: ERIC DOCUMENT REPRODUCTION SERVICE, 3900 Wheeler Avenue, Alexandria, VA 22304

a. ERIC NUMBER -- the ED number indicates the document has been processed and entered into Resources in Education. This identification number is the number to use when ordering a document or when requesting information about a document.

b. EDRS PRICE -- if material is available through the ERIC Document Reproduction Service, the price of the material when it was entered into the ERIC system and the form of the material is indicated. "MF" means microfiche; "HC" means Xerox copy. Prices are subject to change. Current prices of microfiche and paper copies are listed in the back of each issue of Resources in Education; consult the latest monthly issue for current prices. Information about ordering items can be obtained by contacting:

ERIC Document Reproduction Service (EDRS)  
3900 Wheeler Avenue  
Alexandria, VA 22304  
(703) 823-0550

Items that are available on microfiche (MF) are contained in microfiche collections at over 700 sites where they can be read. For information on the microfiche locations in your state contact the EQ Instructional Resources Center.

#### B. How to Locate Desired Materials

Users can identify materials of interest by scanning the resume listings, or using the Subject Index or Author Index.

##### 1. Subject Index

The Subject Index is designed to enable the user to search for information on either a broad subject or a narrow information concern. An EW number is included for each item listed under the subject heading. The EW number refers to the abstract entry in the resume section where complete bibliographic information, an abstract of the item, and availability information can be found.

A user can also coordinate a search by checking EW numbers that appear under two or more subject headings. For example, you could check all the EW numbers under Water Treatment and all the EW numbers under Films. EW numbers included under both subject headings would include information relevant to Water Treatment that were films. EW numbers under wastewater treatment and laboratory techniques would provide a list of materials related to Laboratory Techniques and to Wastewater Treatment. Similar techniques could be used to identify other information desired.

Users with ERIC microfiche should check the resume entry. If the document is available on microfiche from the ERIC Document Reproduction Service, the availability will be indicated by "MF" on the resume by "EDRS Price." This means libraries with ERIC microfiche collections should have the document on microfiche.

If you want a document available through the ERIC Document Reproduction Service (EDRS) see the section on ordering documents.

## 2. Author Index

If you desire to locate a document by the name of the author, you can use the Author Index. EW numbers are provided under the author in the Author Index as in the Subject Index. Some documents do not have a listed author; hence, they are not listed in this index.

## III. Correcting an Existing IRIS Record

The IRIS data base will be updated on a quarterly basis. Corrections will be made to the data base at those times. You can help improve IRIS by sending corrections for items you find to be in error.

We request that you duplicate (copy) the resume from the compilation, mark the information you believe to be wrong (or incomplete), and send the marked resume to:

EQ Instructional Resources Center  
1200 Chambers Road, Room 310  
Columbus, Ohio 43212  
(614) 422-6717

Corrections of errors will occur in the IRIS tapes at the next update after comments are received.

If you have difficulty obtaining materials from the listed source in the AVAILABILITY section of the resume, please let us know. We will contact the sources to verify whether the materials are available, but your assistance will provide corrections between annual availability checks.

If you are the supplier of materials in IRIS, please let us know if you remove a product from your list, modify a product on your list, or change the price of the product.

#### IV. Requests to Receive Information about IRIS and the IRC Bulletin

Information regarding IRIS, materials in IRIS, and modifications in the system will be announced in the IRC Bulletin. The Bulletin is issued about four times a year as information is available.

If you are not on the mailing list write to the EQ Instructional Resources Center for subscription information.

If you need information about IRIS you can also phone (614) 422-6717 with your questions., , ,

#### V. Requests for Assistance in Using IRIS

If you need help in using the IRIS manuals, phone (614) 422-6717 or write to the EQ Instructional Resources Center. Staff are normally available from about 8:30 a.m. to 4:30 p.m. Eastern time to answer your questions.

#### VI. How to Locate Other Relevant Educational Materials

A number of people have requested information related to such areas as management, basic skills (reading, mathematics, writing) human relations, contract negotiations, and other topics. The EQ Instructional Resources Center has developed or obtained some materials in these areas.

Another excellent source of information for many educational concerns is the ERIC System.

ERIC is a national information system designed and developed by the U.S. Office of Education, and now supported and operated by the National Institute of Education (NIE), for providing ready access to descriptions of exemplary programs, research and development efforts, and related information that can be used in developing more effective educational programs.

There are 16 Clearinghouses in the nationwide ERIC network. Each specializes in a different, multi-discipline, educational area. Each searches out pertinent documents.

The ERIC Clearinghouses have responsibility within the network for acquiring the significant educational literature within their particular areas, selecting the highest quality and most relevant material, processing (i.e., cataloging, indexing, abstracting) the selected items for input to the data base, and also for providing information analysis products and various user services based on the data base.

The 16 ERIC Clearinghouses are listed on the next few pages, together with addresses, telephone numbers, and brief scope notes describing the areas they cover. You can contact them for assistance in locating information relevant to their scope notes.

A. ERIC Clearinghouse on Adult, Career, and Vocational Education

The Ohio State University  
National Center for Research in Vocational Education  
1960 Kenny Road  
Columbus, Ohio 43210  
Telephone: (614) 486-3655

Career education, formal and informal at all levels, encompassing attitudes, self-knowledge, decision-making skills, general and occupational knowledge, and specific vocational and occupational skills; adult and continuing education, formal and informal, relating to occupational, family, leisure, citizen, organizational, and retirement roles; vocational and technical education, including new sub-professional fields, industrial arts, and vocational rehabilitation for the handicapped.

B. ERIC Clearinghouse on Counseling and Personnel Services

University of Michigan  
School of Education, Room 2108  
Ann Arbor, Michigan 48109  
Telephone: (313) 764-9492

Preparation, practice, and supervision of counselors at all educational levels and in all settings, theoretical development of counseling and guidance, use and results of personnel procedures such as testing, interviewing, disseminating, and analyzing such information, group work and case work; nature of pupil, student, and adult characteristics; personnel workers and their relation to career planning, family consultations, and student orientation activities.

C. ERIC Clearinghouse on Elementary and Early Childhood Education

University of Illinois  
College of Education  
805 West Pennsylvania Avenue  
Urbana, Illinois 61801  
Telephone: (217) 333-1386

Prenatal factors, parental behavior; the physical, psychological, social, educational, and cultural development of children from birth through the primary grades; educational theory, research and practice related to the development of young children.

D. ERIC Clearinghouse on Educational Management

University of Oregon  
Library, Room 108  
1787 Agate Street  
Eugene, Oregon 97403  
Telephone: (503) 686-5043

Leadership, management, and structure of public and private educational organizations; practice and theory of administration; preservice and inservice preparation of administrators, tasks and processes of administration, methods and varieties of organization, organizational change, and social context of the organization.

Sites, buildings, and equipment for education; planning, financing, constructing, renovating, equipping, maintaining, operating, insuring, utilizing, and evaluating educational facilities.

E. ERIC Clearinghouse on Handicapped and Gifted Children

Council for Exceptional Children  
1920 Association Drive  
Reston, Virginia 22091  
Telephone: (703) 620-3660

Aurally handicapped, visually handicapped, mentally handicapped, physically handicapped, emotionally disturbed, speech handicapped, learning disabilities, and the gifted; behavior, psychomotor, and communication disorders, administration of special education services; preparation and continuing education of professional and paraprofessional personnel; preschool learning and development of the exceptional; general studies on creativity.

F. ERIC Clearinghouse on Higher Education

George Washington University  
One Dupont Circle, NW, Suite 630  
Washington, DC 20036  
Telephone: (202) 296-2597

Various subjects relating to college and university students, college and university conditions and problems, college and university programs; curricular and instructional problems and programs, faculty, institutional research; federal programs, professional education (medical, law, etc.), graduate education, university extension programs, teaching-learning, planning, governance, finance, evaluation, interinstitutional arrangements, and management of higher educational institutions.

G. ERIC Clearinghouse on Information Resources

Syracuse University  
School of Education  
Huntington Hall, Room 030  
150 Marshall Street  
Syracuse, New York 13210  
Telephone: (315) 423-3640

Management, operation, and use of libraries; the technology to improve their operation and the education, training, and professional activities of librarians and information specialists. Educational techniques involved in microteaching, systems analysis, and programmed instruction employing audiovisual teaching aids and technology, such as television, radio, computers, and cable television, communication satellites, microforms, and public television.

H. ERIC Clearinghouse for Junior Colleges

University of California at Los Angeles (UCLA)  
Mathematical Sciences Building, Room 8118  
405 Hilgard Avenue  
Los Angeles, California 90024  
Telephone: (213) 825-3931

Development, administration, and evaluation of public and private community junior colleges. Junior college students, staff, curricula, programs, libraries, and community services.

I. ERIC Clearinghouse on Languages and Linguistics

Center for Applied Linguistics  
1118 "22nd" Street, NW  
Washington, DC 20037  
Telephone: (202) 429-9551

Languages and linguistics. Instructional methodology, psychology of language learning, cultural and intercultural content, application of linguistics, curricular problems and developments, teacher training and qualifications, language sciences, psycholinguistics, theoretical and applied linguistics, language pedagogy, bilingualism, and commonly taught languages including English and speakers of other languages.

J. ERIC Clearinghouse on Reading and Communication Skills  
National Council of Teacher of English  
1111 Kenyon Road  
Urbana, Illinois 61801  
Telephone: (217) 328-3870

Reading, English, and communication skills, preschool through college. Educational research and development in reading, writing, speaking, and listening. Identification, diagnosis, and remediation of reading problems. Speech communication--forensics, mass communication, interpersonal and small group interaction, interpretation, rhetorical and communication theory, instruction development, speech sciences, and theater. Preparation of instructional staff and related personnel in these areas.

All aspects of reading behavior with emphasis on physiology, psychology, sociology, and teaching. Instructional materials, curricula, tests and measurement, preparation of reading teachers and specialists, and methodology at all levels. Role of libraries and other agencies in fostering and guiding reading. Diagnostic and remedial services in school and clinical settings.

K. ERIC Clearinghouse on Rural Education and Small Schools  
New Mexico State University  
Box 3AP  
Las Cruces, New Mexico 88003  
Telephone: (505) 646-2623

Education of Indian Americans, Mexican Americans, Spanish Americans, and migratory farm workers and their children; outdoor education; economic, cultural, social, or other factors related to educational programs in rural areas and small schools; disadvantaged of rural and small school populations.

L. ERIC Clearinghouse for Science, Mathematics and Environmental Education  
The Ohio State University  
1200 Chambers Road - Room 310  
Columbus, Ohio 43212  
Telephone: (614) 422-6717

All levels of science, mathematics, and environmental education; development of curriculum and instructional materials; media applications; impact of interest, intelligence, values, and concept development upon learning; preservice and inservice teacher education and supervision.

M. ERIC Clearinghouse for Social Studies/Social Science Education  
 Indiana University  
 Social Studies Development Center  
 2805 East 10th St.  
 Bloomington, IN 47405  
 Telephone: (812) 335-3838

All levels of social studies and social science; all activities relating to teachers; content of disciplines; applications of learning theory, curriculum theory, child development theory, and instructional theory; research and development programs; special needs of student groups; education as a social science; social studies/social science and the community.

N. ERIC Clearinghouse on Teacher Education  
 American Association of Colleges for Teacher Education (AACTE)  
 One Dupont Circle, NW, Suite 610  
 Washington, DC 20036  
 Telephone: (202) 293-2450

School personnel at all levels, all issues from selection through preservice and inservice preparation and training to retirement; curricula, educational theory and philosophy; general education not specifically covered by Educational Management Clearinghouse; Title XI NDEA Institutes not covered by subject speciality in other ERIC Clearinghouses; all aspects of physical education.

O. ERIC Clearinghouse on Tests, Measurement, and Evaluation  
 Educational Testing Service (ETS)  
 Rosedale Road  
 Princeton, New Jersey 08541  
 Telephone: (609) 734-5176

Tests and other measurement devices; evaluation procedures and techniques; application of tests, measurement, or evaluation in educational projects or programs.

P. ERIC Clearinghouse on Urban Education  
 Teachers College, Columbia University  
 Institute for Urban and Minority Education  
 Box 40  
 525 West 120th Street  
 New York, New York 10027  
 Telephone: (212) 678-3433

The relationship between urban life and schooling; the effect of urban experiences and environments from birth onward; the academic, intellectual, and social performance of urban children and youth from grade three through college entrance (including the effect of self concept, motivation, and other affective influences), education of urban, Puerto Rican and Asian American

populations, and rural and urban black populations; programs and practices which provide learning experiences designed to meet the special needs of diverse populations served by urban schools and which build upon their unique as well as their common characteristics, structural changes in the classroom, school, school system, and community and innovative instructional practices which directly affect urban children and youth; programs, practices, and materials related to economic and ethnic discrimination, segregation, desegregation, and integration in education; issues, programs, practices, and materials related to redressing the curriculum imbalance in the treatment of ethnic minority groups.

Q. Educational Resources Information Center

Office of Educational Research and Improvement (OERI)  
 555 New Jersey, Ave. NW  
 Room 522  
 Washington, DC 20208  
 Telephone: (202) 626-9240

There are other sources of educational information in many states. Included are information dissemination units in the state departments of education, intermediate education units, and local education units. In many cases, a local school administrator or school librarian can help you locate assistance.

## VII. How to Order Materials

- The AVAILABILITY field in the resume indicates where materials can be obtained. A few of the sources are explained.
  - A. A number of audiovisual materials can be obtained on a rental basis or purchased from the EQ Instructional Resources Center. Most items previously available from the NTOTC office are available from the EQ Instructional Resources Center at The Ohio State University. For further information write or call.
  - B. Some of the materials are available through the ERIC Document Reproduction Service. MF (microfiche) are 4" x 6" sheets of microfilm; up to 96 pages of text can be reproduced on one sheet. HC (paper copy) is a reproduction of the document in paper form at the original size.

Order forms for these materials can be obtained from:

ERIC Document Reproduction Service  
 3900 Wheeler Avenue  
 Alexandria, VA 22304  
 (703) 823-0550

C. The EQ Instructional resources Center will provide Xerox copies of materials that are not copyrighted for \$1.00 per document plus \$0.06 per page.

If you can not obtain materials that are listed or have difficulty obtaining materials, please contact the EQ Instructional Resources Center. We can provide assistance in obtaining materials from some sources. If materials become unavailable, we will remove them from the IRIS data base.

## RESUME SECTION

21

IRIS ACCESSION NUMBER: EW009245

PUBLICATION DATE: 81

TITLE: RESPONSIBILITIES TO ADDRESS O&M CONSIDERATIONS IN THE CONSTRUCTION GRANTS PROCESS: A ROSE BY ANY OTHER NAME WOULD SMELL.

DESCRIPTOR: AUDIOVISUAL AIDS; \*CONSTRUCTION GRANTS; GRANT PROGRAMS; FACILITIES; INSPECTION; \*INSTRUCTIONAL MATERIALS; MAINTENANCE; \*OPERATIONS (WASTEWATER); PLANNING; \*POSTSECONDARY EDUCATION; SLIDES; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 115 SLIDES AND CASSETTE TAPE. RENTAL PRICE: \$15.00

ABSTRACT: THIS IS A SLIDE-TAPE PRESENTATION THAT CAN BE USED WITH THE INSTRUCTOR'S MANUAL (EW 006 971) AND THE PARTICIPANT HANDBOOK (EW 006 972). INCLUDED IN THIS PACKAGE IS A SUGGESTED AGENDA, SOME FACILITIES PLANS, SOME CASE HISTORIES, AND A FINAL PLAN OF OPERATION. THE MATERIALS ARE DATED, BUT CAN BE ADAPTED.

AVAILABILITY: EQ INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW010821

PUBLICATION DATE: FEB 84

TITLE: MEETING A BASIC HUMAN NEED: AID'S RURAL POTABLE WATER AND SANITATION PROGRAM.

DESCRIPTOR: \*DEVELOPING COUNTRIES; \*DRINKING WATER; \*FEDERAL ROLE; \*FOREIGN AID; \*USAID; \*ECUADOR; \*WATER TREATMENT; \*INDONESIA; \*MALAWI; \*PERU; \*TANZANIA; \*PERFORMANCE EVALUATION; \*PROJECT MANAGEMENT; \*SANITATION; \*WASTE DISPOSAL; \*WATER SUPPLY; \*WATER QUALITY

DESCRIPTIVE NOTE: 68P.

ABSTRACT: THIS REPORT BY THE US GENERAL ACCOUNTING OFFICE PRESENTS RESULTS OF A REVIEW OF USAID'S POTABLE WATER AND SANITATION ACTIVITIES IN ECUADOR, INDONESIA, MALAWI, PERU AND TANZANIA. RECOMMENDATIONS FOR MODIFICATIONS OF THE PROGRAM ARE MADE.

AVAILABILITY: U.S. GENERAL ACCOUNTING OFFICE, DOCUMENT HANDLING AND INFORMATION SERVICES FACILITY, P.O. BOX 6015, GAITHERSBURG, MD 20760

IRIS ACCESSION NUMBER: EW012175

PUBLICATION DATE: 84

TITLE: THE DRAGON HUNTERS.

PERSONAL AUTHOR: GRAHAM, FRANK

DESCRIPTOR: \*BIOLOGICAL CONTROL; \*ENVIRONMENT; \*INSECTS; \*PEST CONTROL; \*RESEARCH

DESCRIPTIVE NOTE: 334P. PRICE: \$22.95

ABSTRACT: DESCRIBED ARE BIOLOGICAL METHODS FOR CONTROLLING INSECTS. THE NONPOLLUTING TEST CONTROL PROCEDURES ARE RELATED BY PRESENTING THE WORK OF A NUMBER OF ENVIRONMENTAL SCIENTISTS.

AVAILABILITY: E.P. DUTTON, INC., 2 PARK AVE., NEW YORK, NY 10016

IRIS ACCESSION NUMBER: EW012371

PUBLICATION DATE: 84

TITLE: MICROBIOLOGICAL METHODS FOR ENVIRONMENTAL BIOTECHNOLOGY.

PERSONAL AUTHOR: GRAINGER, J. M.; AND LYNCH J. M.

DESCRIPTOR: \*ACTIVATED SLUDGE PROCESS; \*BIOTECHNOLOGY; \*BIOLOGY; \*LANDFILLS; \*MICROBIOLOGY; \*SLUDGE; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 421P. PRICE: \$65.00

ABSTRACT: THIS BOOK PRESENTS A VARIETY OF MICROBIOLOGICAL METHODS FOR ENVIRONMENTAL BIOTECHNOLOGY. CHAPTERS INCLUDE DISCUSSIONS ON THE DYNAMICS OF CELLULOSE DECOMPOSITION, MATHEMATICAL MODELING OF METHANE PRODUCTION IN WASTEWATER SLUDGE DIGESTION, COMPUTER-CONTROLLED FERMENTERS FOR SIMULATION OF THE ACTIVATED SLUDGE PROCESS, AND ESTIMATION AND CONTROL OF MICROBIAL ACTIVITY IN THE LANDFILL.

AVAILABILITY: ACADEMIC PRESS, ORLANDO, FL 32887

IRIS ACCESSION NUMBER: EW012962

PUBLICATION DATE: 83

TITLE: INTRODUCTION TO WASTEWATER TREATMENT PROCESSES. SECOND EDITION.

PERSONAL AUTHOR: RAMALHO, R.

DESCRIPTOR: \*DESIGN; \*FACILITIES; \*INDUSTRIAL WASTES; \*INSTRUCTIONAL MATERIAL; \*OPERATIONS (WASTEWATER); \*SLUDGE; \*TERTIARY TREATMENT; \*UNIT OPERATIONS; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 580P. PRICE: \$59.00

ABSTRACT: THIS SECOND EDITION REPRESENTS A MAJOR REVISION EMPHASIZING THE PRINCIPLES OF CHEMICAL KINETICS, REACTOR DESIGN, AND THE MECHANISM OF BIOLOGICAL TREATMENT PROCESSES. THE AUTHOR EMPLOYS A SCIENTIFIC APPROACH TO BASIC PRINCIPLES OF UNIT OPERATIONS AND THE PROCESSES USED. AN IN-DEPTH EVALUATION OF THE TYPES OF WASTEWATER PROBLEMS IS PROVIDED AND SUGGESTIONS FOR PROPER SELECTION OF THE MODE OF

TREATMENT AND THE DESIGN OF THE EQUIPMENT IS INCLUDED. CONTENTS INCLUDE: CHARACTERIZATION OF DOMESTIC AND INDUSTRIAL WASTEWATER, SLUDGE TREATMENT AND DISPOSAL, AND TERTIARY TREATMENT OF WASTEWATERS.

AVAILABILITY: ACADEMIC PRESS, INC., ATTN.: COMMERCIAL SALES DIVISION, 6277 SEA HARBOR DRIVE, ORLANDO, FL 32821

IRIS ACCESSION NUMBER: EW013385

PUBLICATION DATE: MAR 86

TITLE: CHEMICAL RESISTANCE FIELD TEST METHODS.

PERSONAL AUTHOR: BERARDINELLI, S. P.

DESCRIPTOR: \*ACCIDENT PREVENTION; \*ANALYTICAL TECHNIQUES; \*CHEMICALS; \*CHEMICAL RESISTANCE; \*LABORATORY PROCEDURES; \*PROTECTIVE CLOTHING; \*SAFETY

DESCRIPTIVE NOTE: 43P. PRICE CODE: PC A03/MF A01. ORDER NO.: PB86-137437/WE<sub>P</sub>

ABSTRACT: THE MANUAL FOR TESTING THE RESISTANCE OF CHEMICAL PROTECTIVE CLOTHING (CPC) IS PRESENTED. THE MANUAL IS INTENDED FOR INDUSTRIAL HYGIENISTS WHO HAVE SOME KNOWLEDGE OF ANALYTICAL CHEMISTRY, ESPECIALLY GAS CHROMATOGRAPHY. CPC IS DEFINED AS GARMENTS, SUCH AS GLOVES, BOOTS, COVERALLS, APRONS, OR ENCAPSULATING SUITS THAT PROTECT WORKERS PRIMARILY FROM DERMAL CONTACT WITH LIQUID CHEMICALS. CHEMICALS CAN BE TRANSPORTED THROUGH CPC BY MATERIAL FAILURE CAUSED BY CHEMICAL DEGRADATION, BULK PENETRATION THROUGH PORES, RIPS, ZIPPERS, OR SEAMS, OR PERMEATION (MOLECULAR FLOW THROUGH THE MATERIAL). DEGRADATION CAN BE MEASURED BY VISUAL OR PHYSICAL CHANGES IN MATERIALS AFTER EXPOSURE TO CONCENTRATED CHEMICALS. PENETRATION CAN BE EVALUATED BY USING GAS OR PRESSURIZED CHEMICAL METHODS SPECIFIED BY THE AMERICAN SOCIETY FOR TESTING AND MATERIALS. PERMEATION CAN BE MEASURED USING METHODS THAT ASSESS BREAKTHROUGH TIME AND STEADY STATE PERMEATION RATE. PHYSICAL PROPERTIES AND DEGRADATION, PENETRATION, AND PERMEATION DATA ARE USEFUL FOR SELECTING APPROPRIATE GARMENT MATERIALS. METHODS FOR TESTING THE RESISTANCE OF CPC TO DEGRADATION, PENETRATION, OR PERMEATION BY LIQUID CHEMICALS UNDER FIELD CONDITIONS ARE DESCRIBED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW013394

PUBLICATION DATE: 85

TITLE: HAZARDOUS MATERIALS MANAGEMENT: A SELF-PACED LEARNING MODULE.

PERSONAL AUTHOR: FORD, K.

DESCRIPTOR: \*ENVIRONMENTAL HEALTH; \*HAZARDOUS MATERIALS; \*INSTRUCTIONAL MATERIALS; \*MANAGEMENT; \*POSTSECONDARY

EDUCATION; \*STORAGE; \*WASTE DISPOSAL

DESCRIPTIVE NOTE: 96P. PRICE CODE: PC A05/MF A01. ORDER NO.: HRP-0906649/9/WE<sub>P</sub>

ABSTRACT: THE SELF-PACED LEARNING MODULE IS INTENDED TO IMPROVE THE KNOWLEDGE AND SKILLS OF PRACTITIONERS IN ENVIRONMENTAL HEALTH, AS WELL AS OTHER INVOLVED PERSONS, IN CONTROLLING THE HAZARD TO HUMAN HEALTH FROM THE STORAGE AND USE OF POTENTIALLY HAZARDOUS SUBSTANCES AND THE STORAGE AND/OR DISPOSAL OF THE WASTES RESULTING FROM THEIR USE.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW013502

PUBLICATION DATE: JUN 85

TITLE: 1985 REPORT ON GREAT LAKES WATER QUALITY.

DESCRIPTOR: \*ANNUAL REPORTS; HAZARDOUS WASTES; \*GREAT LAKES; \*PHOSPHORUS; \*RECOMMENDATIONS; \*SURVEILLANCE; \*TOXIC SUBSTANCES; \*WATER QUALITY; \*WATER POLLUTION CONTROL; \*REGULATIONS

DESCRIPTIVE NOTE: 224P.

ABSTRACT: THIS IS THE 1985 ANNUAL REPORT FROM THE GREAT LAKES WATER QUALITY BOARD TO THE INTERNATIONAL JOINT COMMISSION. THE REPORT INCLUDES SECTIONS ON RECOMMENDATIONS, TOXIC SUBSTANCES, AREAS OF CONCERN, PHOSPHORUS CONTROL, SURVEILLANCE, AGREEMENT PROGRESS, AND A SUMMARY.

AVAILABILITY: GREAT LAKES REGIONAL OFFICE, 100 OUELLETTE AVENUE, WINDSOR, ONTARIO, N9A 6T3 OR PO BOX 32869 DETROIT, MI 48232-2869

IRIS ACCESSION NUMBER: EW013506

PUBLICATION DATE: SEP 85

TITLE: ENVIRONMENTAL SANITATION REVIEWS.

PERSONAL AUTHOR: LOEHR, RAYMOND C.; SENGUPTA, MANOTOSH

DESCRIPTOR: \*ETHANOL; \*INDUSTRIAL WASTES; \*MANAGEMENT; \*RECYCLING; \*WASTE DISPOSAL; \*WASTE TREATMENT; \*WASTE RECOVERY

DESCRIPTIVE NOTE: 55P.

ABSTRACT: THIS PUBLICATION IS A REVIEW OF MANAGEMENT OF ETHANOL PRODUCTION WASTES. SECTIONS INCLUDE (1) ETHANOL PRODUCTION PROCESSES, (2) ETHANOL PRODUCTION WASTE CHARACTERISTICS, (3) TREATMENT AND DISPOSAL OF ETHANOL WASTES, (4) RECOVERY AND REUSE, AND (5) SUMMARY AND CONCLUSIONS.

AVAILABILITY: ENVIRONMENTAL SANITATION INFORMATION CENTER,

ASIAN INSTITUTE OF TECHNOLOGY, P.O. BOX 2754, BANGKOK 10501,  
THAILAND

IRIS ACCESSION NUMBER: EW013509

PUBLICATION DATE: JUL 85

TITLE: POLLUTION TRANSPORT IN MISSISSIPPI SOUND.

PERSONAL AUTHOR: LYTHE, THOMAS F.; LYTHE, JULIA S.

DESCRIPTOR: \*MISSISSIPPI SOUND; \*OCEANOGRAPHY; \*POLLUTION;  
\*POLLUTANT TRANSPORT; \*REPORTS; \*WATER POLLUTION CONTROL;  
\*WATER QUALITY

DESCRIPTIVE NOTE: 130P. PRICE: \$12.00

ABSTRACT: THIS PUBLICATION REPORTS DATA ON POLLUTION TRANSPORT IN THE MISSISSIPPI SOUND ON THE SOUTHERN BOUNDARY OF MISSISSIPPI. SECTIONS OF THE REPORT INCLUDE (1) TYPES OF SAMPLES AND ANALYSIS SELECTION, (2) SAMPLE COLLECTION AND ANALYSIS SCHEME, (3) POLLUTANT DISTRIBUTION, (4) QUANTITATIVE POLLUTANT ASSESSMENT, (5) ENVIRONMENTAL STRESS INDEX, AND (6) USE OF SCIENTIFIC INFORMATION.

AVAILABILITY: MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM,  
P.O. BOX 7000, OCEAN SPRINGS, MS 39564-7000

IRIS ACCESSION NUMBER: EW013512

PUBLICATION DATE: 85

TITLE: INVESTIGATION OF LEGIONELLA PNEUMOPHILA IN DRINKING WATER.

PERSONAL AUTHOR: WITHERELL, LINDEN E.; AND OTHERS.

DESCRIPTOR: \*DISEASES; \*DRINKING WATER; \*HOT WATER HEATERS;  
\*LEGIONELLA PNEUMOPHILA; \*PUBLIC HEALTH; \*RESEARCH NEEDS;  
\*RESEARCH REPORTS; \*WATER QUALITY; \*WATER SUPPLY

DESCRIPTIVE NOTE: PRICE: \$10.00. ORDER NO.: PB 85-237  
733/AS

ABSTRACT: AN INVESTIGATION OF LEGIONELLA PNEUMOPHILA IN DRINKING WATER SYSTEMS AND HOME PLUMBING APPURTENANCES WAS UNDERTAKEN IN TWO PHASES. NO L PNEUMOPHILA WERE ISOLATED FROM A SAMPLE OF 17 COMMUNITY WATER SYSTEMS. TWO SAMPLES (OUT OF 184) FROM HOT WATER HEATERS CONTAINED L. PNEUMOPHILA. FURTHER STUDY IS NEEDED; IT IS POSSIBLE THAT L PNEUMOPHILA IS CARRIED IN LOW AMOUNTS BY WATER SYSTEMS AND MAY INCREASE IN WATER HEATERS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285  
PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW013513

PUBLICATION DATE: 85

TITLE: CONTROLLING ASBESTOS LOSS FROM ASBESTOS-CEMENT PIPE IN AGGRESSIVE WATERS.

PERSONAL AUTHOR: TATE, CAROL H.; AND OTHERS

DESCRIPTOR: \*ASBESTOS; \*ASBESTOS/CEMENT PIPE; \*DRINKING WATER; \*FIELD STUDIES; \*OPERATIONS (WATER); \*PILOT STUDIES; \*RESEARCH REPORTS; \*WATER DISTRIBUTION; \*WATER TREATMENT; \*WASHINGTON

DESCRIPTIVE NOTE: PRICE: \$20.50. ORDER NO.: PB 85-191  
690/AS

ABSTRACT: THIS STUDY WAS INSTITUTED TO EVALUATE DIFFERENT METHODS OF CONTROLLING ASBESTOS FIBER LOSS IN WATER PIPES. BOTH PILOT PLANT AND FIELD TESTS WERE CONDUCTED. PHASE I INVOLVED THE STUDY OF A DISTRIBUTION SYSTEM AND PILOT PLANT TESTING. PHASE II CONSISTED OF A FIELD TEST TO EVALUATE THE MOST PROMISING CONTROL STRATEGY FOUND IN THE PILOT TESTS. RESULTS ARE REPORTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285  
PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW013514

PUBLICATION DATE: 85

TITLE: DETERMINATION OF DITHiocarbamate PESTICIDES IN WASTEWATERS.

PERSONAL AUTHOR: ENGEL, T. M.; AND OTHERS

DESCRIPTOR: \*ANALYTICAL TECHNIQUES; \*DITHiocarbamates;  
\*LABORATORY PROCEDURES; \*PESTICIDES; \*WASTEWATER

DESCRIPTIVE NOTE: PRICE: \$11.95. ORDER NO.: PB 86-118  
726/AS

ABSTRACT: A METHOD WAS MODIFIED AND VALIDATED FOR THE DETERMINATION OF DITHiocarbamate PESTICIDES IN WASTEWATER. THE PROCEDURE IS DESCRIBED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285  
PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW013515

PUBLICATION DATE: 85

TITLE: DETERMINATION OF PHENOLS IN INDUSTRIAL AND MUNICIPAL WASTEWATERS.

PERSONAL AUTHOR: FLORANCE, J. R.; AND OTHERS

DESCRIPTOR: \*ANALYTICAL TECHNIQUES; \*LABORATORY PROCEDURES;

\*PHENOLS; \*PRIORITY POLLUTANTS; \*INDUSTRIAL WASTES;  
\*MUNICIPAL WASTES; \*WASTEWATER; \*RESEARCH

DESCRIPTIVE NOTE: PRICE: \$16.95. ORDER NO.: PB 86-119  
120/AS

ABSTRACT: THIS REPORT DESCRIBES THE RESEARCH CONDUCTED TO DEVELOP AN ANALYTICAL TEST PROCEDURE FOR THE ANALYSIS OF SPECIFIC ORGANIC TOXIC SUBSTANCES IN EFFLUENT WASTEWATERS. THE TEST PROCEDURE IS APPLICABLE TO THE ANALYSIS OF 11 OF THE 114 PRIORITY POLLUTANTS IDENTIFIED BY THE USEPA AS CATEGORY B-PHENOLS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW013516

PUBLICATION DATE: 85

TITLE: DRASTIC: A STANDARDIZED SYSTEM FOR EVALUATING GROUNDWATER POLLUTION POTENTIAL USING HYDROGEOLOGIC SETTINGS.

DESCRIPTOR: \*CONTAMINATION; \*DRASTIC; \*GROUNDWATER; \*EVALUATION; \*SYSTEM DEVELOPMENT; \*POLLUTION CONTROL; \*HYDROGEOLOGIC SETTINGS; \*WATER QUALITY; \*MAPS; \*RISK ASSESSMENT

DESCRIPTIVE NOTE: PRICE: \$17.50. ORDER NO.: PB 85-228  
146/AS

ABSTRACT: THIS RESEARCH PROJECT WAS DESIGNED TO CREATE A METHODOLOGY THAT WILL PERMIT THE GROUNDWATER POLLUTION POTENTIAL OF ANY HYDROGEOLOGIC SETTING TO BE SYSTEMATICALLY EVALUATED ANYWHERE IN THE UNITED STATES. THE PROJECT DESIGN ALSO INCLUDED THE DEVELOPMENT OF A STANDARDIZED SYSTEM THAT COULD BE DISPLAYED ON MAPS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW013517

PUBLICATION DATE: 85

TITLE: FIELD STUDIES OF LINER INSTALLATION METHODS AT LANDFILLS AND SURFACE IMPOUNDMENTS.

PERSONAL AUTHOR: SHULTZ, DAVID W.

DESCRIPTOR: \*CONSTRUCTION; \*FIELD STUDIES; \*LANDFILLS; \*LINER PLACEMENT; \*LINERS; \*LINING MATERIALS; \*SURFACE IMPOUNDMENTS; \*RESEARCH NEEDS; \*POLLUTION CONTROL

DESCRIPTIVE NOTE: PRICE: \$11.95. ORDER NO.: PB 85-117  
067/AS

ABSTRACT: PROCEDURES WERE INVESTIGATED FOR SUBGRADE PREPARATION AND LINER PLACEMENT DURING THE CONSTRUCTION OF

LINED SURFACE IMPOUNDMENTS AND LANDFILLS. LINING MATERIALS STUDIED INCLUDED ADMIXES, SOILS AND CLAYS, SPRAYED ON MEMBRANES, AND POLYMERIC MEMBRANES. RESULTS ARE REPORTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW013518

PUBLICATION DATE: 85

TITLE: FILTRATION OF GIARDIA CYSTS AND OTHER SUBSTANCES: VOLUME 3. RAPID-RATE FILTRATION.

PERSONAL AUTHOR: AL-ANI, MOHAMMED; AND OTHERS

DESCRIPTOR: \*GIARDIA; \*OPERATIONS (WATER); \*RESEARCH REPORTS; \*WATER QUALITY; \*WATER TREATMENT

DESCRIPTIVE NOTE: PRICE: \$25.00. ORDER NO.: PB 85-194  
645/AS

ABSTRACT: THE PURPOSE OF THIS RESEARCH WAS TO DETERMINE HOW TO REMOVE GIARDIA LAMBLIA CYSTS FROM WATER SUPPLIES BY RAPID RATE FILTRATION WHEN RAW WATERS HAVE TURBIDITY LEVELS OF LESS THAN 1 NTU. THE OBJECTIVES OF THE STUDY INCLUDED DETERMINING CHEMICAL PRETREATMENT, THE RESPECTIVE ROLES OF PROCESS VARIABLES ON REMOVAL EFFICIENCIES OF GIARDIA CYSTS, TURBIDITY, AND BACTERIA, AND DETERMINING WHETHER A SURROGATE INDICATOR WAS FEASIBLE TO ASSESS THE TREATMENT EFFICIENCIES FOR REMOVAL OF GIARDIA CYSTS. RESULTS ARE REPORTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW013519

PUBLICATION DATE: 85

TITLE: ANAEROBIC-AEROBIC TREATMENT PROCESS FOR THE REMOVAL OF PRIORITY POLLUTANTS.

PERSONAL AUTHOR: SOLNIM, ZAHAVA

DESCRIPTOR: \*ANAEROBIC TREATMENT; \*AEROBIC TREATMENT; \*DNOC; \*4,6-DINITRO-O-CRESOL; \*PERFORMANCE EVALUATION; \*PRIORITY POLLUTANTS; \*RESEARCH REPORTS; \*OPERATIONS (WASTEWATER); \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: PRICE: \$13.00. ORDER NO.: PB 85-226  
900/AS

ABSTRACT: THE REMOVAL OF 4, 6-DINITRO-O-CRESOL (DNOC), A PHENOLIC PRIORITY POLLUTANT, AND THE REMOVAL KINETICS WERE INVESTIGATED USING AN ANAEROBIC RECYCLE FLUIDIZED BED REACTOR AS A PRETREATMENT STAGE FOLLOWED BY AN ACTIVATED SLUDGE REACTOR AS THE AEROBIC TREATMENT STAGE. RESULTS ARE REPORTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285

PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW013520

PUBLICATION DATE: 85

TITLE: APPLICATION OF ADSORPTIVE/ABSORPTIVE RESINS AND MEMBRANES FOR TOXIC AND HAZARDOUS WASTE REDUCTION.

PERSONAL AUTHOR: UHRAMACHER, J CARL

DESCRIPTOR: \*ION EXCHANGE; \*MEMBRANE SEPARATION; \*METAL INDUSTRY; METALS; \*RESEARCH REPORTS; \*HAZARDOUS MATERIALS; \*OPERATIONS (WASTES); \*OPERATIONS (WASTEWATER); \*TECHNOLOGY; \*WASTE TREATMENT; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: PRICE: \$13.00. ORDER NO.: PB 85-241 776/AS

ABSTRACT: THIS STUDY WAS CONDUCTED TO ASSESS THE STATE OF THE ART OF COMMERCIALLY AVAILABLE AND DEVELOPING TECHNOLOGIES FOR REDUCING OR ELIMINATING HAZARDOUS MATERIALS FROM LIQUID WASTES GENERATED IN THE METALS FINISHING AND MUNITIONS MANUFACTURING INDUSTRIES. THE STUDY EXAMINES MEMBRANE SEPARATION SYSTEMS AND ION EXCHANGE/ADSORPTION RESIN SYSTEMS FOR PURFYING THESE INDUSTRIAL WASTEWATERS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW013521

PUBLICATION DATE: 85

TITLE: ULTRAVIOLET DISINFECTION OF WATER FOR SMALL WATER SUPPLIES.

PERSONAL AUTHOR: CARLSON, DALE A.

DESCRIPTOR: \*DISINFECTION; \*DRINKING WATER; \*GIARDIA; \*E. COLI; \*OPERATIONS (WATER); \*WATER TREATMENT; \*RESEARCH REPORTS; \*ULTRAVIOLET RADIATION

DESCRIPTIVE NOTE: PRICE: \$14.50. ORDER NO.: PB 85-239 960/AS

ABSTRACT: THE MAJOR IMPETUS FOR THIS STUDY WAS THE DRAMATIC INCREASE IN WATERBORNE DISEASE, SPECIFICALLY GIARDIASIS, IN THE UNITED STATES SINCE THE MID-1960'S. THE PRESENT INVESTIGATION USED BOTH FIELD AND LABORATORY STUDIES TO EVALUATE THE EFFECTIVENESS OF ULTRAVIOLET RADIATION IN REDUCING THE VIABILITY OF E. COLI, AND GIARDIA.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW013525  
PUBLICATION DATE: 84

TITLE: HEALTH EFFECTS ASSESSMENT FOR XYLENE.

DESCRIPTOR: \*HEALTH EFFECTS; \*POLLUTION CONTROL; \*TOXIC SUBSTANCES; \*XYLENE

DESCRIPTIVE NOTE: 39P. PRICE CODE: PC A03/MF A01. ORDER NO.: PB86-134178/WE

ABSTRACT: THE DOCUMENT REPRESENTS A BRIEF, QUANTITATIVELY ORIENTED SCIENTIFIC SUMMARY OF HEALTH EFFECTS DATA. IT WAS DEVELOPED BY THE ENVIRONMENTAL CRITERIA AND ASSESSMENT OFFICE TO ASSIST THE OFFICE OF EMERGENCY AND REMEDIAL RESPONSE IN ESTABLISHING CHEMICAL-SPECIFIC HEALTH-RELATED GOALS OF REMEDIAL ACTIONS. IF APPLICABLE, CHEMICAL-SPECIFIC SUBCHRONIC AND CHRONIC TOXICITY INTERIM ACCEPTABLE INTAKES ARE DETERMINED FOR SYSTEMIC TOXICANTS, OR Q(SUB 1) VALUES ARE DETERMINED FOR CARCINOGENS FOR BOTH ORAL AND INHALATION ROUTES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW013528

PUBLICATION DATE: SEP 84

TITLE: HEALTH EFFECTS ASSESSMENT FOR 1, 1-DICHLOROETHANE.  
DESCRIPTOR: \*HEALTH EFFECTS; \*1, 1-DICHLOROETHANE; \*POLLUTION CONTROL; \*TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 37P. PRICE CODE: PC A03/MF A01. ORDER NO.: PB86-134384/WE

ABSTRACT: THE DOCUMENT REPRESENTS A BRIEF, QUANTITATIVELY ORIENTED SCIENTIFIC SUMMARY OF HEALTH EFFECTS DATA. IT WAS DEVELOPED BY THE ENVIRONMENTAL CRITERIA AND ASSESSMENT OFFICE TO ASSIST THE OFFICE OF EMERGENCY AND REMEDIAL RESPONSE IN ESTABLISHING CHEMICAL-SPECIFIC HEALTH-RELATED GOALS OF REMEDIAL ACTIONS. IF APPLICABLE, CHEMICAL-SPECIFIC SUBCHRONIC AND CHRONIC TOXICITY INTERIM ACCEPTABLE INTAKE ARE DETERMINED FOR SYSTEMATIC TOXICANTS, OR Q(SUB 1) VALUES ARE DETERMINED FOR CARCINOGENS FOR BOTH ORAL AND INHALATION ROUTES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW013553

PUBLICATION DATE: MAR 86

TITLE: ENVIRONMENT CANADA'S PROJECT FOR VEHICLE AND PERSONAL PORTABLE ANALYTICAL SYSTEMS FOR CHEMICAL EMERGENCIES.

PERSONAL AUTHOR: BOBRA, A. M.  
DESCRIPTOR: \*ANALYTICAL TECHNIQUES; CHEMICALS; \*CANADA;  
ENVIRONMENT; EMERGENCIES; \*HAZARDOUS MATERIALS; \*CHEMICAL  
EMERGENCIES; \*EQUIPMENT; SAMPLING; \*SPILLS; \*TOXIC  
SUBSTANCES

DESCRIPTIVE NOTE: 9-20P.

ABSTRACT: DESCRIBED ARE VEHICAL-PORTABLE AND PERSON-  
PORTABLE ANALYTICAL SYSTEMS FOR SPILL INCIDENTS. THE  
ENVIRONMENT CANADA PROGRAM HAS FIVE LEVELS OF EQUIPMENT FROM  
PORTABLE TO FIXED.

AVAILABILITY: SPILL TECHNOLOGY NEWSLETTER; V11 N1

IRIS ACCESSION NUMBER: EW013554

PUBLICATION DATE: MAR 86

TITLE: MEMBRANE TECHNOLOGY IN THE OIL PATCH.

PERSONAL AUTHOR: WHITTAKER, HARRY

DESCRIPTOR: \*DRINKING WATER; \*FILTRATION; INDUSTRY;  
\*MEMBRANE TECHNOLOGY; \*MEMBRANES; \*OPERATIONS (WASTEWATER);  
\*OIL; \*REVERSE OSMOSIS; \*WASTEWATER TREATMENT; \*SEPARATION  
PROCESSES

DESCRIPTIVE NOTE: 21-33P.

ABSTRACT: DESCRIBED ARE APPLICATIONS OF MEMBRANE TECHNOLOGY  
TO OIL MATERIALS IN CANADA.

AVAILABILITY: SPILL TECHNOLOGY NEWSLETTER; V11 N1

IRIS ACCESSION NUMBER: EW013555

PUBLICATION DATE: MAR 86

TITLE: RECENT PETROLEUM DISPERSIBILITY RESULTS.

PERSONAL AUTHOR: FINGAS, MERVIN; AND OTHERS

DESCRIPTOR: \*DISPERSION; \*CHEMICAL DISPERSIBILITY;  
\*LABORATORY TESTS; \*OIL; \*OIL SPILLS

DESCRIPTIVE NOTE: 34-36P.

ABSTRACT: PRESENTED ARE DATA ON THE EXTENT TO WHICH A  
PETROLEUM PRODUCT DISPERSES INTO WATER.

AVAILABILITY: SPILL TECHNOLOGY NEWSLETTER; V11 N1

IRIS ACCESSION NUMBER: EW013556  
PUBLICATION DATE: JUN 86

TITLE: MANAGEMENT LEARNING: BEYOND PROGRAM DESIGN.

PERSONAL AUTHOR: LOWY, ALEX; AND OTHERS

DESCRIPTOR: \*LEARNING; \*MANAGEMENT; \*MANAGERS; \*RESEARCH  
REPORTS

DESCRIPTIVE NOTE: 34-37P.

ABSTRACT: TRAINING DOESN'T TEACH MANAGERS HOW TO DO THEIR  
JOBS, BUT THERE ARE WAYS FOR THEM TO LEARN. DESCRIBED ARE  
THE RESULTS OF THE MANAGERIAL LEARNING STUDY, A PROJECT  
DEVOTED TO UNDERSTANDING HOW MANAGERS LEARN. FACTORS RELATED  
TO JOB, CONTEXT, AND PERSON CATEGORIES ARE DISCUSSED.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V40 N6

IRIS ACCESSION NUMBER: EW013557

PUBLICATION DATE: JUN 86

TITLE: WHY MBO FAILS SO OFTEN.

PERSONAL AUTHOR: LEONARD, JOSEPH W.

DESCRIPTOR: \*FEEDBACK; \*MANAGEMENT; \*OBJECTIVES;  
\*PARTICIPATION

DESCRIPTIVE NOTE: 38-39P.

ABSTRACT: STRONG COMMUNICATION LINKS CAN HELP INSURE MBO  
SUCCESS. A LITERATURE REVIEW INDICATES THAT PARTICIPATION  
AND FEEDBACK ARE IMPORTANT FOR SUCCESS OF MBO PROGRAMS.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V40 N6

IRIS ACCESSION NUMBER: EW013558

PUBLICATION DATE: JUN 86

TITLE: TAKING THE HELM OF LEADERSHIP DEVELOPMENT.

PERSONAL AUTHOR: STRONG, GRAHAM

DESCRIPTOR: \*LEADERSHIP; \*MANAGEMENT; \*TRAINING

DESCRIPTIVE NOTE: 43-45P.

ABSTRACT: DESCRIBED IS A HIGH SEAS EXPERIENCE THAT TEACHES  
POTENTIAL LEADERS THE IMMEDIATE CONSEQUENCES OF THEIR  
ACTIONS.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V40 N6

IRIS ACCESSION NUMBER: EW013559

PUBLICATION DATE: JUN 86

TITLE: GROUP DEVELOPMENT AND SITUATIONAL LEADERSHIP: A MODEL FOR MANAGING GROUPS.

PERSONAL AUTHOR: CAREW, DONALD K.; AND OTHERS

DESCRIPTOR: \*GROUP DEVELOPMENT; \*LEADERSHIP; \*LEADERSHIP STYLE; \*MANAGEMENT

DESCRIPTIVE NOTE: 46-58P.

ABSTRACT: IF MANAGERS COULD DIAGNOSE THE DEVELOPMENT LEVEL OF THEIR GROUPS AND ADAPT THEIR MANAGEMENT STYLE TO FIT, THEY WOULD FIND GROUP LEADERSHIP MUCH EASIER AND MORE PROFITABLE. DESCRIBED ARE WAYS TO MAKE A COLLECTION OF INDIVIDUALS INTO A SYNERGISTIC TEAM.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V40 N6

IRIS ACCESSION NUMBER: EW013560

PUBLICATION DATE: JUN 86

TITLE: MAINTENANCE TRAINING PACKAGES: AN INTEGRATED APPROACH.

PERSONAL AUTHOR: KEDEM, AVI; SMILANSKY, JONATHAN

DESCRIPTOR: \*MATERIAL DEVELOPMENT; \*INSTRUCTIONAL MATERIALS; \*TRAINING; \*TRAINING MATERIALS

DESCRIPTIVE NOTE: 62-65P.

ABSTRACT: AN ISRAELI AIRCRAFT COMPANY HAS HAD TO GET CREATIVE IN DEVELOPING ITS TRAINING PROGRAM FOR A NEW AIR FORCE FIGHTER PLANE. DESCRIBED IS THE PROCEDURE FOR DEVELOPING TRAINING PACKAGES. THE DEVELOPMENT PROCESS CAN BE USED BY OTHER ORGANIZATIONS.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V40 N6

IRIS ACCESSION NUMBER: EW013561

PUBLICATION DATE: JUN 86

TITLE: FINDING USES FOR SLUDGE.

PERSONAL AUTHOR: ABERLEY, RICHARD C.; BERG, SUSAN

DESCRIPTOR: ALTERNATIVE TECHNOLOGY; \*OPERATIONS (WASTEWATER); \*REGULATIONS; \*SLUDGE; \*SLUDGE DISPOSAL; TECHNOLOGY; \*WASTEWATER TREATMENT; COMPOSTING; LAND APPLICATION; INCINERATION

DESCRIPTIVE NOTE: 38-46P.

ABSTRACT: DESCRIBED ARE CHANGES IN SLUDGE MANAGEMENT DUE TO

CURRENT AND PROBABLE FUTURE REGULATORY CONSTRAINTS. AS A RESULT, COMMUNITIES ARE SEEKING OPTIONS TO TRADITIONAL SLUDGE DISPOSAL METHODS.

AVAILABILITY: AMERICAN CITY AND COUNTY; V101 N6

IRIS ACCESSION NUMBER: EW013562

PUBLICATION DATE: MAY 86

TITLE: SOFTWARE SELECTOR.

PERSONAL AUTHOR: YOUNG, DICK

DESCRIPTOR: \*COMPUTER APPLICATIONS; \*COMPUTER SOFTWARE; \*MANAGEMENT; \*OPERATIONS (WASTEWATER); \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 26, 55P.

ABSTRACT: DESCRIBED IS A COMPREHENSIVE SOFTWARE PACKAGE FOR THE MANAGEMENT AND OPERATION OF MUNICIPAL WASTEWATER TREATMENT PLANTS. THE SOFTWARE IS KNOWN AS DATASTREAM. THE PACKAGE CONTAINS FOUR DIFFERENT PROGRAMS.

AVAILABILITY: POLLUTION ENGINEERING; V18 N5

IRIS ACCESSION NUMBER: EW013563

PUBLICATION DATE: JUN 86

TITLE: CITY USES TWO-PRONGED STRATEGY FOR THM CONTROL.

PERSONAL AUTHOR: DWARKANATH, AMAR, P.E.

DESCRIPTOR: \*AIR STRIPPING; \*CHLORINE DIOXIDE; \*DRINKING WATER; \*OPERATIONS (WATER); \*STANDARDS; \*THM; \*TRIHALOMETHANES; \*WATER TREATMENT

DESCRIPTIVE NOTE: 60-61P.

ABSTRACT: DESCRIBED IS A DUAL APPROACH FOR TREATING WATER THAT USED CHLORINE DIOXIDE FOR QUICK REDUCTION OF TRIHALOMETHANE LEVELS WHILE AN AIR STRIPPING FACILITY WAS CONSTRUCTED.

AVAILABILITY: PUBLIC WORKS; V117 N6

IRIS ACCESSION NUMBER: EW013564

PUBLICATION DATE: JUN 86

TITLE: A REVIEW OF WASTE-TO-ENERGY TECHNOLOGY.

PERSONAL AUTHOR: REILLY, THOMAS C.

DESCRIPTOR: BIDDING; \*ENERGY PRODUCTION; \*CALIFORNIA; PERMITS; \*PUBLIC OWNERSHIP; \*PRIVATE OWNERSHIP; PROCUREMENT; \*RECYCLING; \*RESOURCE RECOVERY; \*TECHNOLOGY; \*WASTE DISPOSAL

DESCRIPTIVE NOTE: 62-64P.

ABSTRACT: THIS IS THE CONCLUSION OF A TWO-PART ARTICLE COVERING PROCUREMENT, OWNERSHIP, AND AN OVERVIEW OF WASTE-TO-ENERGY PROJECTS IN CALIFORNIA.

AVAILABILITY: PUBLIC WORKS; V117 N6

IRIS ACCESSION NUMBER: EW013565

PUBLICATION DATE: JUN 86

TITLE: GRAVITY PRESSURE COLLECTION SYSTEM DRAINS VIADUCT.

PERSONAL AUTHOR: URIBE, FRANCISCO A P.E.; SCHWAB, RICHARD E. P.E.

DESCRIPTOR: \*GRAVITY PRESSURE; \*OPERATIONS (WASTEWATER); \*MISSOURI; \*STORMWATER; \*WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 65P.

ABSTRACT: DESCRIBED IS A STORMWATER COLLECTION SYSTEM FOR A VIADUCT. GRAVITATIONAL FORCE IS USED TO DISCHARGE STORMWATER RUNOFF.

AVAILABILITY: PUBLIC WORKS; V117 N6

SESSION NUMBER: EW013566

PUBLICATION DATE: JUN 86

TITLE: TREATMENT METHODS TO BE STUDIED AT DEMONSTRATION PLANT.

PERSONAL AUTHOR: SCHEADER, EDWARD P.E.; AND OTHERS

DESCRIPTOR: \*DEMONSTRATION PLANTS; \*CARBON ADSORPTION; \*DIATOMACEOUS EARTH; \*FILTRATION; \*OPERATIONS (WATER); \*OZONE; \*WATER TREATMENT

DESCRIPTIVE NOTE: 66-69P.

TITLE: TREATMENT PLANNED FOR NEW YORK CITY'S CROTON SUPPLY WILL BE OPTIMIZED BY DEMONSTRATION PLANT TESTS OF DIATOMACEOUS EARTH FILTRATION, OZONATION, AND CARBON ADSORPTION.

AVAILABILITY: PUBLIC WORKS; V117 N6

IRIS ACCESSION NUMBER: EW013567

PUBLICATION DATE: JUN 86

TITLE: MICROPROCESSORS READ WATER METERS.

PERSONAL AUTHOR: HILL, QUENTIN C.

DESCRIPTOR: COMPUTER APPLICATIONS; \*MICROPROCESSORS; \*METER READING; \*WATER METERS; WATER RATES; WATER SUPPLY

DESCRIPTIVE NOTE: 74-76P.

ABSTRACT: PRESENTED IS A REVIEW OF A UTILITY'S CHANGE FROM THE METER-BOOK METHOD TO USE OF A HAND-HELD MICROPROCESSOR SYSTEM.

AVAILABILITY: PUBLIC WORKS; V117 N6

IRIS ACCESSION NUMBER: EW013568

PUBLICATION DATE: JUN 86

TITLE: EFFECTS OF HEAVY METALS UPON THE BIOLOGICAL WASTEWATER TREATMENT PROCESS.

PERSONAL AUTHOR: GERARDI, MICHAEL H.

DESCRIPTOR: \*HEAVY METALS; \*METALS; \*OPERATIONS (WASTEWATER); \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 77-80P.

ABSTRACT: PRESENTED IS A DISCUSSION OF THE PROBLEMS CAUSED BY HEAVY METALS IN WASTEWATER TREATMENT OPERATIONS AND CONTROL METHODS.

AVAILABILITY: PUBLIC WORKS; V117 N6

IRIS ACCESSION NUMBER: EW013569

PUBLICATION DATE: JUN 86

TITLE: IS OZONE THE SOLUTION TO YOUR WATER TREATMENT PROBLEMS?

PERSONAL AUTHOR: PULICE, DOMENIC J., P.E.

DESCRIPTOR: \*DISINFECTION; \*OZONE; \*OPERATIONS (WATER); \*WATER TREATMENT

DESCRIPTIVE NOTE: 81-84, 138P.

ABSTRACT: THIS ARTICLE EXPLORES THE POSSIBILITIES OF TREATING WATER WITH OZONE AND DESCRIBES EQUIPMENT USED TO TREAT AMBIENT AIR AND GENERATE OZONE.

AVAILABILITY: PUBLIC WORKS; V117 N6

IRIS ACCESSION NUMBER: EW013570

PUBLICATION DATE: JUN 86

TITLE: CLEANING NEW PIPING SYSTEMS.

PERSONAL AUTHOR: CIMBORA, ROGER M.

DESCRIPTOR: \*CLEANING; \*OPERATIONS (WATER); \*PIPES; \*WATER DISTRIBUTION; \*WATER PIPES; \*PUBLIC HEALTH

DESCRIPTIVE NOTE: 92-93P.

ABSTRACT: DESCRIBED ARE PROCEDURES FOR CLEANING NEW WATER PIPE SYSTEMS.

AVAILABILITY: PUBLIC WORKS; V117 N6

IRIS ACCESSION NUMBER: EW013571

PUBLICATION DATE: JUN 86

TITLE: PUBLIC ATTITUDES TOWARD WATER UTILITIES.

PERSONAL AUTHOR: MANWARING, JAMES F.; AND OTHERS

DESCRIPTOR: \*ATTITUDES; \*CONSUMERS; \*DRINKING WATER; \*PERFORMANCE EVALUATION; \*PUBLIC ATTITUDES; \*SURVEYS; \*TAP WATER; \*WATER UTILITIES

DESCRIPTIVE NOTE: 34-40P.

ABSTRACT: MOST AMERICANS FIND LITTLE TO CRITICIZE ABOUT TAP WATER. RESULTS OF A SURVEY COMMISSIONED BY THE AWWA RESEARCH FOUNDATION ARE REPORTED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V78 N6

IRIS ACCESSION NUMBER: EW013572

PUBLICATION DATE: JUN 86

TITLE: REDUCING THE COST OF WATER.

PERSONAL AUTHOR: REGNIER, JOHN E.; AND OTHERS

DESCRIPTOR: \*ALABAMA; \*COSTS; \*DRINKING WATER; \*ENERGY CONSERVATION; \*ELECTRICITY; \*LEAK DETECTION; \*RESEARCH REPORTS; \*WATER UTILITIES

DESCRIPTIVE NOTE: 41-45P.

ABSTRACT: THE ALABAMA RURAL WATER ASSOCIATION INVESTIGATED METHODS OF SHAVING ENERGY COSTS TO REDUCE EXPENSES FOR SMALL SYSTEMS. A STUDY OF 80 RURAL ALABAMA UTILITIES IS REPORTED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V78 N6

IRIS ACCESSION NUMBER: EW013573

PUBLICATION DATE: JUN 86

TITLE: MANAGING DROUGHTS THROUGH TRIGGERING MECHANISMS.

PERSONAL AUTHOR: HREZO, MARGARET S.; AND OTHERS

DESCRIPTOR: \*CONSERVATION; \*DROUGHT; \*REGULATIONS; \*MANAGEMENT; \*STATE ROLE; \*WATER CONSERVATION; \*WATER SUPPLY; \*WATER RESOURCES; \*INTERSTATE COMMISSIONS

DESCRIPTIVE NOTE: 46-51P.

ABSTRACT: SOME STATES HAVE DEVELOPED DROUGHT INDICATORS THAT AUTOMATICALLY IMPLEMENT VARYING DEGREES OF WATER RESTRICTIONS BEFORE THE TAP RUNS DRY. THIS ARTICLE REVIEWS PROCEDURES USED BY SEVEN STATES AND TWO INTERSTATE COMMISSIONS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V78 N6

IRIS ACCESSION NUMBER: EW013574

PUBLICATION DATE: JUN 86

TITLE: TUCSON'S CUSTOMER RELATIONS PROGRAM.

PERSONAL AUTHOR: BRICE, ROBERT L.

DESCRIPTOR: \*ARIZONA; \*CONSUMERS; \*CUSTOMER RELATIONS; \*POLICIES; \*PUBLIC RELATIONS; \*WATER UTILITIES

DESCRIPTIVE NOTE: 52-55P.

ABSTRACT: BY ADOPTING A PUBLIC RELATIONS PROGRAM PATTERNED AFTER THOSE OF PRIVATE COMPANIES, THE TUCSON WATER UTILITY HAS IMPROVED ITS ABILITY TO COMMUNICATE WITH CUSTOMERS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V78 N6

IRIS ACCESSION NUMBER: EW013575

PUBLICATION DATE: JUN 86

TITLE: PENAL SUMS OF PERFORMANCE BONDS: THE ILLUSION OF CERTAINTY.

PERSONAL AUTHOR: GILL, JOHN P.; PAUL, DAVID G.

DESCRIPTOR: \*CONSTRUCTION; \*CONSTRUCTION CLAIMS; \*CONTRACTORS; \*LEGAL RESPONSIBILITIES; \*INSURANCE COMPANIES; \*PERFORMANCE BONDS

DESCRIPTIVE NOTE: 56-61P.

ABSTRACT: WHEN A CONTRACTOR DEFAULTS, CREDITORS FREQUENTLY SEEK TO OBTAIN THEIR INTERESTS FROM THE PERFORMANCE BOND. OPTIONS AVAILABLE TO THE INSURANCE COMPANY FOR MEETING ITS RESPONSIBILITIES ARE CONSIDERED. SUGGESTIONS FOR OWNERS INVOLVED IN A CLAIM ARE ALSO PRESENTED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V78 N6

PUBLICATION DATE: JUN 86

TITLE: A REVIEW OF CHLORINE DIOXIDE IN DRINKING WATER TREATMENT.

PERSONAL AUTHOR: AIETA, E. MARCO; BERG, JAMES D.

DESCRIPTOR: \*CHEMISTRY; \*CHLORINE DIOXIDE; \*DISINFECTION; \*DRINKING WATER; \*PERFORMANCE EVALUATION; \*WATER TREATMENT; \*LITERATURE REVIEWS

DESCRIPTIVE NOTE: 62-72P.

ABSTRACT: THIS ARTICLE REVIEWS THE PHYSICAL, CHEMICAL, AND BIOLOGICAL PROPERTIES OF CHLORINE DIOXIDE AS THEY RELATE TO WATER TREATMENT.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V78 N6

IRIS ACCESSION NUMBER: EW013577

PUBLICATION DATE: JUN 86

TITLE: TOXICOLOGICAL PROBLEMS ASSOCIATED WITH CHLORINE DIOXIDE.

PERSONAL AUTHOR: CONDIE, LYMAN W.

DESCRIPTOR: \*COMPARATIVE EVALUATION; \*CHLORINE; \*CHLORINE DIOXIDE; \*DRINKING WATER; \*PUBLIC HEALTH; \*LITERATURE REVIEWS; \*TOXIC SUBSTANCES; \*HEALTH; \*WATER TREATMENT

DESCRIPTIVE NOTE: 73-78P.

ABSTRACT: THE TOXICOLOGICAL HAZARDS ASSOCIATED WITH DISINFECTION DRINKING WATER WITH EITHER CHLORINE DIOXIDE OR CHLORINE ARE REVIEWED AND COMPARED. ADDITIONAL RESEARCH IS NEEDED TO ASSESS THE HEALTH RISKS ASSOCIATED WITH CHLORINE DIOXIDE.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V78 N6

IRIS ACCESSION NUMBER: EW013578

PUBLICATION DATE: JUN 86

TITLE: EXPERIENCE WITH CHLORINE DIOXIDE AT DENVER'S REUSE PLANT.

PERSONAL AUTHOR: LAUER, WILLIAM C.; AND OTHERS

DESCRIPTOR: \*CHLORINE DIOXIDE; \*DISINFECTION; \*COLORADO; \*RECYCLING; \*RESEARCH REPORTS; \*WATER REUSE; \*WATER TREATMENT

DESCRIPTIVE NOTE: 79-87P.

DISINFECTANT FOR BACTERIAL INDICATORS, BUT FUTURE STUDIES WILL EVALUATE ITS EFFICACY FOR OTHER PARAMETERS.

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AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V78 N6

IRIS ACCESSION NUMBER: EW013580

PUBLICATION DATE: MAY 86

TITLE: WAYS TO TACKLE THE VOC PROBLEM.

PERSONAL AUTHOR: WILLEY, BRUCE R.; WILLIAMS, ROBERT B.

DESCRIPTOR: \*CHEMICALS; \*ALTERNATIVE TECHNOLOGY; \*DRINKING WATER; \*ORGANIC CHEMICALS; \*OPERATIONS (WATER); \*VOLATILE ORGANIC COMPOUNDS; \*WATER TREATMENT; \*WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 28-23, 45P.

ABSTRACT: THE PRESENCE OF VOLATILE ORGANIC COMPOUNDS (VOC'S) IS A PROBLEM FOR A GROWING NUMBER OF MUNICIPAL WATER SUPPLY OPERATIONS. DESCRIBED ARE SEVERAL ALTERNATIVES FOR CONTROLLING VOC'S.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V133 N5

IRIS ACCESSION NUMBER: EW013581

PUBLICATION DATE: MAY 86

TITLE: METER STANDARDS HAVE BECOME A BARRIER TO PROGRESS.

PERSONAL AUTHOR: STROBEL, DON

DESCRIPTOR: \*COSTS; \*DRINKING WATER; \*EQUIPMENT; \*WATER METERS; \*TECHNOLOGY; \*STANDARDS; \*METER LOSSES; \*WATER RATES; \*WATER SUPPLY

DESCRIPTIVE NOTE: 25-28P.

ABSTRACT: STANDARDS FOR COLD WATER METERS SHOULD BE MODIFIED AND UP-DATED TO REFLECT TODAY'S KNOWLEDGE. WATER UTILITIES ARE LOSING REVENUES DUE TO THE FUNCTIONING OF MANY CURRENT METERS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V133 N5

IRIS ACCESSION NUMBER: EW013582

PUBLICATION DATE: MAY 86

TITLE: AUTOMATING STORMWATER AND COMBINED SEWER SYSTEMS: THE POSSIBILITIES.

PERSONAL AUTHOR: GRIGG, NEIL S.; SCHILLING WOLFGANG

descriptor: \*AUTOMATION; \*AUTOMATIC CONTROLS; \*COMPUTER APPLICATIONS; \*MANAGEMENT; \*OPERATIONS (WASTEWATER); \*SEWER SYSTEMS; \*STORMWATER; \*SURFACE RUNOFF; \*WASTEWATER COLLECTION

descriptive note: 33-35P.

abstract: DESCRIBED ARE ALTERNATIVES FOR AUTOMATING STORMWATER AND COMBINED SEWER SYSTEMS.

availability: WATER ENGINEERING AND MANAGEMENT; V133 N5

iris accession number: EW013583

publication date: MAY 86

title: GRAVITY BELTS THICKEN SLUDGE ECONOMICALLY.

personal author: KORMANIK, RICHARD A.; DEJEWSKI, KAREN A.

descriptor: \*COSTS; \*EQUIPMENT; \*GRAVITY BELTS; \*OPERATIONS (WASTEWATER); \*SLUDGE; \*WASTEWATER TREATMENT

descriptive note: 37-39P.

abstract: DESCRIBED IS AN ALTERNATIVE PROCESS FOR THICKENING RAW AND DIGESTED SLUDGES THAT ARE TAILORED TO PLANT DESIGN AND BUDGET.

availability: WATER ENGINEERING AND MANAGEMENT; V133 N5

iris accession number: EW013584

publication date: JUN 86

title: THE CLARIFIER: POLICING THE PROFESSION.

personal author: BYUS, LOU ALYN

descriptor: \*CERTIFICATION REVOCATION; \*CERTIFICATION; \*OPERATORS; \*PERFORMANCE EVALUATION; \*PERSONNEL; \*WASTEWATER TREATMENT; \*WATER TREATMENT

descriptive note: 8-10P.

abstract: DISCUSSED ARE PROBLEMS WITH WATER OR WASTEWATER OPERATORS AND CONDITIONS THAT MAY REQUIRE SUSPENDING OR REVOKING AN OPERATOR'S CERTIFICATE.

availability: OPERATIONS FORUM; V3 N6

iris accession number: EW013585

publication date: JUN 86

title: ENERGY SPREADSHEETS: HOW TO USE YOUR COMPUTER FOR CONSERVATION.

personal author: ANNIS, UARK

descriptor: \*CONSERVATION; \*ENERGY CONSERVATION; \*COSTS; \*MANAGEMENT; \*OPERATIONS (WASTEWATER); \*SPREADSHEETS; \*WASTEWATER TREATMENT

descriptive note: 18-21P.

abstract: DESCRIBED ARE PROCEDURES FOR CONSERVING ENERGY IN A WASTEWATER TREATMENT PLANT. USE OF AN ENERGY SPREADSHEET FACILITATES THE PROGRAM.

availability: OPERATIONS FORUM; V3 N6

iris accession number: EW013586

publication date: JUN 86

title: FUNDAMENTALS: PROCESS CONTROL, PART II.

personal author: HOBSON, TIM

descriptor: \*ACTIVATED SLUDGE PROCESS; \*LABORATORY PROCEDURES; \*OPERATIONS (WASTEWATER); \*PROCESS CONTROL; \*WASTEWATER TREATMENT; \*MANAGEMENT

descriptive note: 24-27P.

abstract: THIS IS THE SECOND ARTICLE IN A SERIES ON PROCESS CONTROL FUNDAMENTALS. THIS ARTICLE CONSIDERS MEASURING AND INTERPRETING THE SETTLEABILITY OF THE ACTIVATED SLUDGE IN A WASTEWATER TREATMENT PLANT. MOST OF THE INFORMATION IS BASED ON PUBLICATIONS WRITTEN BY ALFRED WEST.

availability: OPERATIONS FORUM; V3 N6

iris accession number: EW013587

publication date: MAR 86

title: TRANSMITTAL MEMORANDUM 86-1. HANDBOOK OF PROCEDURES. CONSTRUCTION GRANTS PROGRAM FOR MUNICIPAL WASTEWATER TREATMENT WORKS.

descriptor: \*CONSTRUCTION GRANTS PROGRAM; \*DESIGN; \*CONSTRUCTION; \*FACILITIES; \*FUNDING; \*PLANNING; \*REGULATIONS; \*USEPA

descriptive note: 162P. PRICE: \$1.50

abstract: THIS PUBLICATION CONTAINS THE SECOND UPDATING TO THE HANDBOOK OF PROCEDURES. PAGES FOR THE UPDATES (REPLACEMENT PAGES) ARE INCLUDED. A SUMMARY CHART LISTING EACH REVISED PAGE AND THE REASON FOR THE CHANGES IS ALSO INCLUDED.

availability: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

TITLE: HAZARDOUS WASTE: ADEQUACY OF EPA ATTORNEY RESOURCE LEVELS.

DESCRIPTOR: \*BUDGET; \*ENFORCEMENT; \*ATTORNEYS; \*GAO; \*PERFORMANCE EVALUATION; \*POLLUTION CONTROL; \*PERSONNEL SHORTAGES; \*RCRA; \*SUPERFUND; \*USEPA

DESCRIPTIVE NOTE: 23P. FIRST 5 COPIES FREE. ADDITIONAL COPIES \$2.00 EACH.

ABSTRACT: THIS IS A REPORT BY THE UNITED STATES GENERAL ACCOUNTING OFFICE TO SUMMARIZE THE INFORMATION OBTAINED ON THE ADEQUACY OF THE USEPA'S REGIONAL ATTORNEY RESOURCES TO ENFORCE THE COMPREHENSIVE ENVIRONMENTAL, COMPENSATION AND LIABILITY ACT (SUPERFUND) AND THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) AND TO DEFEND EPA IN LAWSUITS UNDER THESE ACTS. RESULTS INCLUDE RESOURCE DESCRIPTIONS, STAFF SHORTAGES, AND EFFORTS TO QUANTIFY RESOURCE NEEDS.

AVAILABILITY: UNITED STATES, GENERAL ACCOUNTING OFFICE, WASHINGTON, D.C. 20548

IRIS ACCESSION NUMBER: EW013595

PUBLICATION DATE: FEB 86

TITLE: SUPERFUND: STATUS OF SUPERFUND MANAGEMENT INFORMATION SYSTEMS.

DESCRIPTOR: \*HAZARDOUS WASTES; \*HAZARDOUS WASTE SITES; \*COMPLIANCE; \*ENFORCEMENT; \*INFORMATION SYSTEMS; \*MANAGEMENT; \*PROGRAM EVALUATION; \*PERFORMANCE EVALUATION; \*POLLUTION CONTROL; \*SUPERFUND; \*USEPA

DESCRIPTIVE NOTE: 18P. FIRST 5 COPIES FREE. ADDITIONAL COPIES \$2.00 EACH.

ABSTRACT: THIS IS A REPORT BY THE UNITED STATES GENERAL ACCOUNTING OFFICE TO DETERMINE THE STATUS OF EPA'S EFFORTS TO IMPROVE ITS MANAGEMENT INFORMATION SYSTEMS FOR SUPERFUND ENFORCEMENT AND REMEDIAL PROGRAMS. THE STATUS OF EPA'S EFFORTS AND PLANS OF THE AGENCY ARE DETAILED. RECOMMENDED CHANGES BY GAO ARE ALSO PRESENTED.

AVAILABILITY: UNITED STATES, GENERAL ACCOUNTING OFFICE, WASHINGTON, D.C. 20548

IRIS ACCESSION NUMBER: EW013596

PUBLICATION DATE: FEB 86

TITLE: HAZARDOUS WASTE: ENVIRONMENTAL SAFEGUARDS JEOPARDIZED WHEN FACILITIES CEASE OPERATING.

DESCRIPTOR: \*ENFORCEMENT; \*COMPLIANCE; \*COSTS; GAO; \*GOVERNMENTAL ROLE; \*HAZARDOUS WASTES; \*HAZARDOUS WASTE

DESCRIPTIVE NOTE: 66P. FIRST 5 COPIES FREE. ADDITIONAL COPIES \$2.00 EACH.

ABSTRACT: THIS IS A REPORT BY THE UNITED STATES GENERAL ACCOUNTING OFFICE REGARDING THE EXTENT TO WHICH: (1) OWNERS/OPERATORS OF HAZARDOUS WASTE FACILITIES HAVE DECLARED BANKRUPTCY AND THEREBY AVOIDED PAYING CLOSURE AND POST CLOSURE COSTS; (2) FINANCIAL ASSURANCE REQUIREMENTS ENSURE THAT SUFFICIENT FUNDS WILL BE AVAILABLE TO CLOSE AND PROVIDE POSTCLOSURE CARE AT THESE FACILITIES, (3) FACILITIES THAT CEASE OPERATIONS ARE INSPECTED FOR COMPLIANCE WITH CLOSURE REQUIREMENTS; AND (4) USEPA AND THE STATES ARE TAKING ENFORCEMENT ACTION FOR VIOLATIONS OF THOSE REQUIREMENTS.

AVAILABILITY: UNITED STATES, GENERAL ACCOUNTING OFFICE, WASHINGTON, D.C. 20548

IRIS ACCESSION NUMBER: EW013597

PUBLICATION DATE: FEB 86

TITLE: CHEMICAL DATA: EPA'S DATA COLLECTION PRACTICES AND PROCEDURES ON CHEMICALS.

DESCRIPTOR: \*AIR POLLUTION CONTROL; \*DATA GATHERING; \*DATA GATHERING PROCESSES; \*CERCLA; \*HAZARDOUS WASTES; GAO; \*POLLUTION CONTROL; \*PROGRAM EVALUATION; \*RCRA; \*SOLID WASTES; \*TSCA; \*TOXIC SUBSTANCES; \*USEPA; \*WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 44P. FIRST 5 COPIES FREE. ADDITIONAL COPIES \$2.00 EACH.

ABSTRACT: THIS IS A REPORT BY THE UNITED STATES GENERAL ACCOUNTING OFFICE DESCRIBING: (1) USEPA'S MAJOR DATA-GATHERING AUTHORITY PROVIDED UNDER TSCA, CERCLA, RCRA, AND THE CLEAN AIR ACT; (2) THE TYPES OF DATA USEPA COLLECTS TO SUPPORT REGULATORY DECISIONS, AND (3) USEPA'S VERIFICATION EFFORTS TO ASSURE THE ACCURACY AND RELIABILITY OF THE DATA IT COLLECTS.

AVAILABILITY: UNITED STATES, GENERAL ACCOUNTING OFFICE, WASHINGTON, D.C. 20548

IRIS ACCESSION NUMBER: EW013600

PUBLICATION DATE: DEC 85

TITLE: ACID RAIN: FEDERAL RESEARCH INTO EFFECTS ON WATERS AND FORESTS.

DESCRIPTOR: \*ACID RAIN; \*AQUATIC ENVIRONMENT; \*ENVIRONMENTAL IMPACT; \*FUNDING; \*FORESTS; \*GAO; \*LAKES; \*NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM; \*PERFORMANCE EVALUATION; \*RESEARCH; \*STREAMS

DESCRIPTIVE NOTE: 57P. FIRST 5 COPIES FREE. ADDITIONAL

COPIES \$2.00 EACH.

ABSTRACT: THIS IS A REPORT OF THE UNITED STATES GENERAL ACCOUNTING OFFICE ON THE STATUS AND FUTURE DIRECTION OF THE NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM'S RESEARCH TO DETERMINE ACID DEPOSITION'S EFFECTS ON LAKES STREAMS, AND FORESTS. THE REPORT ALSO PROVIDES INFORMATION ON THE FUNDING SUPPORTING THE NATIONAL PROGRAM'S RESEARCH EFFORT.

AVAILABILITY: UNITED STATES, GENERAL ACCOUNTING OFFICE, WASHINGTON, D.C. 20548

IRIS ACCESSION NUMBER: EW013602

PUBLICATION DATE: JAN 84

TITLE: ENVIRONMENTAL PROTECTION AGENCY HEADQUARTERS VIDEOTAPE CATALOG. SUPPLEMENT I.

DESCRIPTOR: \*AUDIOVISUAL AIDS; \*AIR POLLUTION CONTROL; \*CATALOGS; \*DIRECTORIES; CONSTRUCTION; ENVIRONMENT; \*HAZARDOUS WASTES; GRANTS; REGULATIONS; LAND USE; \*SOLID WASTES; PUBLIC HEALTH; \*TOXIC SUBSTANCES; \*WATER POLLUTION CONTROL; \*USEPA; \*VIDEOTAPES

DESCRIPTIVE NOTE: 136P.

ABSTRACT: THE AUDIOVISUAL BRANCH OF THE USEPA MAINTAINS A LIBRARY OF VIDEOTAPES. THIS SUPPLEMENT UPDATES BUT DOES NOT REPLACE THE 1983 CATALOG (EW 013 603). THE CATALOG CONTAINS AN ABSTRACT SECTION AND VARIOUS INDEXES. INSTRUCTIONS FOR REQUESTING MATERIALS ARE IN EW 013 603.

AVAILABILITY: UNITED STATES, ENVIRONMENTAL PROTECTION AGENCY, OFFICE OF PUBLIC AFFAIRS, ASSISTANT ADMINISTRATOR FOR EXTERNAL AFFAIRS, WASHINGTON, D.C. 20460

IRIS ACCESSION NUMBER: EW013603

PUBLICATION DATE: OCT 83

TITLE: ENVIRONMENTAL PROTECTION AGENCY HEADQUARTERS VIDEOTAPE CATALOG.

DESCRIPTOR: \*AUDIOVISUAL AIDS; \*AIR POLLUTION CONTROL; \*CATALOGS; \*DIRECTORIES; CONSTRUCTION; ENVIRONMENT; \*HAZARDOUS WASTES; GRANTS; REGULATIONS; LAND USE; \*SOLID WASTES; PUBLIC HEALTH; \*TOXIC SUBSTANCES; \*WATER POLLUTION CONTROL; \*USEPA; \*VIDEOTAPES

DESCRIPTIVE NOTE: 72P.

ABSTRACT: THE AUDIOVISUAL BRANCH OF THE USEPA MAINTAINS A LIBRARY OF VIDEOTAPES FOR SHOWING TO VARIOUS AUDIENCES, RANGING FROM EPA EMPLOYEES TO INTERESTED GROUPS AND THE GENERAL PUBLIC. THE INFORMATION OFFERED IN THE TAPES COVERS A WIDE VARIETY OF TOPICS IN ALL EPA PROGRAM AREAS. MOST OF THE TAPES ARE TECHNICAL IN CONTENT WHETHER THEY ADDRESS LAW, SCIENCE, ECONOMICS OR OTHER AREAS OF CONCERN AT EPA. THIS CATALOG CONTAINS CITATIONS FOR VIDEOTAPES PRODUCED THROUGH

FEBRUARY, 1983. THE CATALOG CONTAINS AN ABSTRACT SECTION AND VARIOUS INDEXES. INSTRUCTIONS FOR REQUESTING MATERIALS ARE INCLUDED.

AVAILABILITY: UNITED STATES, ENVIRONMENTAL PROTECTION AGENCY, OFFICE OF PUBLIC AFFAIRS, ASSISTANT ADMINISTRATOR FOR EXTERNAL AFFAIRS, WASHINGTON, D.C. 20460

IRIS ACCESSION NUMBER: EW013604

PUBLICATION DATE: FEB 85

TITLE: CLOTHING PRACTICES BY WISCONSIN PRIVATE USE PESTICIDE APPLICATORS.

PERSONAL AUTHOR: ALBRECHT, DONNA, PH.D.

DESCRIPTOR: \*AGRICULTURAL WORKERS; \*ACCIDENT PREVENTION; \*FARMS; \*PESTICIDES; \*PESTICIDE APPLICATORS; \*RESEARCH STUDIES; \*SAFETY; \*SURVEYS

DESCRIPTIVE NOTE: 93P.

ABSTRACT: THE PROBLEM IN THIS STUDY WAS COMPARING CLOTHING PRACTICES OF APPLICATORS WHO WERE CERTIFIED IN THE STATE OF WISCONSIN TO THOSE WHO WERE NEVER CERTIFIED. THERE WAS NO SIGNIFICANT DIFFERENCE BETWEEN THE GROUPS COMPARED.

AVAILABILITY: DONNA ALBRECHT, PH.D., ASSOCIATE PROFESSOR, APPAREL, TEXTILES AND DESIGN DEPARTMENT, UNIVERSITY OF WISCONSIN-STOUT, MENOMONIE, WISCONSIN 54751

IRIS ACCESSION NUMBER: EW013606

PUBLICATION DATE: JUL 86

TITLE: ECOLOGY AND THE PROBLEMS OF WORLD OCEAN INTEGRATED GLOBAL MONITORING.

PERSONAL AUTHOR: ISRAEL, YU A.; TSYBAN, A. V.

DESCRIPTOR: \*BIOLOGY; \*ECOLOGY; \*ENVIRONMENTAL IMPACTS; \*MONITORING; \*OCEANOGRAPHY; \*POLLUTANTS

DESCRIPTIVE NOTE: 5-23P.

ABSTRACT: THE MODERN ECOLOGICAL STATE OF THE WORLD OCEAN IS ANALYZED, STRESSING THE NEED FOR ORGANIZATION AND DEVELOPMENT OF A SCIENTIFIC BASIS FOR GLOBAL OCEAN MONITORING. THE TASKS AND BASIC PRINCIPLES OF INTEGRATED GLOBAL OCEAN MONITORING ARE DESCRIBED.

AVAILABILITY: ENVIRONMENTAL MONITORING AND ASSESSMENT; V7 NI

TITLE: THE PROGRAMME 'SECTIONS' AND MONITORING OF WORLD OCEAN.

PERSONAL AUTHOR: MARCHUK, G. I.; AND OTHERS

DESCRIPTOR: \*CLIMATE; \*MONITORING; \*OCEANOGRAPHY; \*PHYSICAL CHARACTERISTICS; \*TEMPERATURE

DESCRIPTIVE NOTE: 25-30P.

ABSTRACT: THE MAIN SCIENTIFIC PROBLEMS OF THE PROGRAM ON INVESTIGATING THE WORLD OCEAN'S ROLE IN SHORT-RANGE CLIMATIC VARIATIONS ARE DISCUSSED. IT HAS BEEN SHOWN THAT DATA OBTAINED WITHIN THE FRAMEWORK OF THE PROGRAMS SHOULD SERVE AS A BASELINE FOR OCEAN PHYSICAL CHARACTERISTICS MONITORING.

AVAILABILITY: ENVIRONMENTAL MONITORING AND ASSESSMENT; V7 N1

IRIS ACCESSION NUMBER: EW013608

PUBLICATION DATE: JUL 86

TITLE: THRESHOLDS IN EUTROPHICATION OF NATURAL WATERS.

PERSONAL AUTHOR: SEKI, HUMITAKE

DESCRIPTOR: \*BACTERIOPLANKTON; \*BIOLOGICAL INDICATORS; \*EUTROPHICATION; \*MONITORING; \*OCEANOGRAPHY; \*ORGANIC CARBON; \*MICROBIOLOGY; \*WATER QUALITY; \*MARINE BIOLOGY

DESCRIPTIVE NOTE: 39-46P.

ABSTRACT: THE POPULATION DENSITY OF BACTERIOPLANKTON AND THE CONCENTRATION OF DISSOLVED ORGANIC CARBON COMBINED IS A USEFUL INDICATOR TO MONITOR SUBTLE VARIATIONS IN THE AMOUNT OF EUTROPHICATION. BOTH PARAMETERS CAN BE MEASURED PRECISELY AND READILY BY WIDELY ACCEPTED TECHNIQUES.

AVAILABILITY: ENVIRONMENTAL MONITORING AND ASSESSMENT; V7 N1

IRIS ACCESSION NUMBER: EW013609

PUBLICATION DATE: JUL 86

TITLE: THE HEALTH OF THE OCEANS AND THE NEED FOR ITS MONITORING.

PERSONAL AUTHOR: KULLENBERG, G.

DESCRIPTOR: \*CONTAMINANTS; \*MONITORING; \*OCEANOGRAPHY; \*POLLUTION; \*UNITED NATIONS; \*WATER QUALITY

DESCRIPTIVE NOTE: 47-58P.

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FORMULATING MONITORING REQUIREMENTS.

AVAILABILITY: ENVIRONMENTAL MONITORING AND ASSESSMENT; V7 N1

IRIS ACCESSION NUMBER: EW013610

PUBLICATION DATE: JUL 86

TITLE: TRACE METAL MONITORING OF PELAGIC ORGANISMS FROM THE OPEN MEDITERRANEAN SEA.

PERSONAL AUTHOR: FOWLER, S. W.

DESCRIPTOR: \*MEDITERRANEAN SEA; \*METALS; \*MONITORING; \*BIOLOGY; \*TRACE METALS; \*PELAGIC ORGANISMS; \*OCEANOGRAPHY

DESCRIPTIVE NOTE: 59-78P.

ABSTRACT: DISCUSSED ARE THE RESULTS OF MONITORING TRACE METALS IN PELAGIC ORGANISMS FROM THE OPEN MEDITERRANEAN SEA.

AVAILABILITY: ENVIRONMENTAL MONITORING AND ASSESSMENT; V7 N1

IRIS ACCESSION NUMBER: EW013611

PUBLICATION DATE: JUL 86

TITLE: GLOBAL OCEAN MONITORING FOR THE WORLD CLIMATE RESEARCH PROGRAMME.

PERSONAL AUTHOR: REVELLE, R.; BRETHERTON, F.

DESCRIPTOR: \*BIOLOGY; \*CLIMATE; \*MONITORING; \*OCEANOGRAPHY; \*INSTRUMENTATION; \*FIELD TECHNIQUES; \*WORLD CLIMATE RESEARCH PROGRAM; \*PHYSICAL CHARACTERISTICS

DESCRIPTIVE NOTE: 79-90P.

ABSTRACT: DESCRIBED IS THE GLOBAL OCEAN MONITORING PLAN FOR THE WORLD CLIMATE RESEARCH PROGRAM. INCLUDED ARE DESCRIPTIONS OF INSTRUMENTS AND TECHNIQUES TO BE USED.

AVAILABILITY: ENVIRONMENTAL MONITORING AND ASSESSMENT; V7 N1

IRIS ACCESSION NUMBER: EW013612

PUBLICATION DATE: JUL 86

TITLE: THE MUSSEL WATCH CONCEPT.

PERSONAL AUTHOR: GOLDBERG, EDWARD D.

DESCRIPTOR: \*BIOLOGICAL INDICATORS; \*BIVALVES; \*CHLORINATED HYDROCARBONS; \*MONITORING; \*OCEANOGRAPHY; \*MARINE BIOLOGY; \*POLLUTANTS; \*METALS; \*PCBS

DESCRIPTIVE NOTE: 91-103P.

ABSTRACT: THE USE OF BIVALVES AS ORGANISMS FOR COLLECTION OF MARINE POLLUTANTS WAS EVALUATED.

AVAILABILITY: ENVIRONMENTAL MONITORING AND ASSESSMENT; V7 N1

IRIS ACCESSION NUMBER: EW013618

PUBLICATION DATE: JUL 86

TITLE: AN OPERATOR'S GUIDE TO PROTOZOA AND THEIR ROLE IN THE ACTIVATED SLUDGE PROCESS.

PERSONAL AUTHOR: GERARDI, MICHAEL H.

DESCRIPTOR: \*ACTIVATED SLUDGE PROCESS; \*MICROBIOLOGY; \*OPERATIONS (WASTEWATER); \*PROTOZOA; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 44-47P.

ABSTRACT: THE IMPORTANCE OF PROTOZOA IN THE ACTIVATED SLUDGE PROCESS IS REVIEWED.

AVAILABILITY: PUBLIC WORKS; V117 N7

IRIS ACCESSION NUMBER: EW013619

PUBLICATION DATE: JUL 86

TITLE: METER CHANGEOUT BRINGS WATER LOSSES DOWN, REVENUE UP.

DESCRIPTOR: \*ECONOMICS; \*LEAKS; \*METERS; \*REVENUES; \*WATER METERS; \*WATER DISTRIBUTION; \*UTAH

DESCRIPTIVE NOTE: 52-53P.

ABSTRACT: DESCRIBED IS A PROGRAM IN A UTAH COMMUNITY THAT REPLACED WATER METERS. REPLACING WATER METERS REDUCED LEAKS AND INCREASED REVENUES.

AVAILABILITY: PUBLIC WORKS; V117 N7

IRIS ACCESSION NUMBER: EW013620

PUBLICATION DATE: JUL 86

TITLE: WATER LINE PROBLEMS CAN BE AVOIDED WITH CARE AND TESTING.

PERSONAL AUTHOR: VALLEY, DON, P.E.

DESCRIPTOR: \*CASE HISTORIES; \*INSTALLATION; \*MAINTENANCE; \*PIPES; \*OPERATIONS (WATER); \*WATER DISTRIBUTION; \*WATER PIPES

DESCRIPTIVE NOTE: 61-62P.

ABSTRACT: CASE HISTORIES INDICATE THAT PROPER INSTALLATION OF WATERLINES REDUCES FAILURES.

AVAILABILITY: PUBLIC WORKS; V117 N7

IRIS ACCESSION NUMBER: EW013621

PUBLICATION DATE: JUL 86

TITLE: ADAPTING INDUSTRIAL APPROACHES TO MUNICIPAL WASTEWATER TREATMENT PROBLEMS.

PERSONAL AUTHOR: BURSTEIN, DAVID, P.E.

DESCRIPTOR: \*FACILITIES; \*CONSTRUCTION; \*GUIDELINES; \*MAINTENANCE; \*MANAGEMENT; (WASTEWATER); \*PROCUREMENT; \*WASTEWATER PROJECTS; \*PRIVATIZATION \*OPERATIONS TREATMENT;

DESCRIPTIVE NOTE: 68-71P.

ABSTRACT: DESCRIBED ARE SOME INDUSTRIAL APPROACHES THAT CAN BE USED BY MUNICIPAL WASTEWATER TREATMENT PROGRAMS FOR SOLVING PROBLEMS.

AVAILABILITY: PUBLIC WORKS; V117 N7

IRIS ACCESSION NUMBER: EW013622

PUBLICATION DATE: JUL 86

TITLE: FEATURE: MEETING THE CHALLENGE OF NONPOINT SOURCE CONTROL.

DESCRIPTOR: \*POLLUTANTS; \*GROUNDWATER; \*NONPOINT SOURCE POLLUTION; \*POLLUTION; \*RESEARCH REPORTS; \*SURFACE WATER; \*TRENDS; \*WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 730-740P.

ABSTRACT: THIS ARTICLE IS A SUMMARY OF THE REPORT, "AMERICAS CLEAN WATER, THE STATES' NONPOINT SOURCE ASSESSMENT 1985." CONSIDERED ARE THE BASELINE, MANAGEMENT, SURFACE WATERS, PRIMARY NONPOINT POLLUTION SOURCES, IMPACTED WATERS, POLLUTANTS, GROUNDWATER, FUTURE DIRECTIONS, AND PRIORITIES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N7

DESCRIPTOR: \*DRAWINGS; \*ENGINEERING; \*MAPS; \*METRIC SYSTEM;  
\*RECOMMENDED PRACTICES; \*STANDARD UNITS

DESCRIPTIVE NOTE: 741-743P.

ABSTRACT: THIS IS A REVIEW OF RECOMMENDED PRACTICES FOR ENGINEERING DRAWINGS AND MAPS. RECOMMENDATIONS ARE PRESENTED CONCERNING TYPICAL MAP AND PLAN SCALES, DRAWING PAPER SIZES, AND UNITS OF DIMENSIONING.

AVAILABILITY: JOURNAL, WATER POLLUTION CONTROL FEDERATION; V58 N7

IRIS ACCESSION NUMBER: EW013624

PUBLICATION DATE: JUL 86

TITLE: TECHNOLOGY EVALUATION OF THE DUAL DIGESTION SYSTEM.

PERSONAL AUTHOR: APPLETION, A. RON, JR.; VENOSA, ALBERT D.

DESCRIPTOR: \*ALTERNATIVE TECHNOLOGY; \*DUAL DIGESTION SYSTEMS; \*COSTS; \*OPERATIONS (WASTEWATER); \*PERFORMANCE EVALUATION; \*SLUDGE STABILIZATION; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 764-773P.

ABSTRACT: REPORTED ARE THE RESULTS OF A STUDY OF A DUAL DIGESTION SYSTEM THAT MIGHT QUALIFY FOR AN EPA CLASSIFICATION THAT ALLOWS MORE OPTIONS FOR ULTIMATE SLUDGE DISPOSAL.

AVAILABILITY: JOURNAL, WATER POLLUTION CONTROL FEDERATION; V58 N7

IRIS ACCESSION NUMBER: EW013625

PUBLICATION DATE: JUL 86

TITLE: EVALUATION OF PLASTIC MEDIA IN TRICKLING FILTERS.

PERSONAL AUTHOR: RICHARD, TYLER; REINHART, DEBRA

DESCRIPTOR: \*ACTIVATED SLUDGE PROCESS; \*GEORGIA; \*OPERATIONS (WASTEWATER); \*PERFORMANCE EVALUATION; \*PILOT STUDIES; \*PLASTIC MEDIA; \*TRICKLING FILTERS; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 774-783P.

ABSTRACT: DIFFERENCES IN MEDIA PERFORMANCE WERE ATTRIBUTED TO DIFFERENCES IN CONTACT TIME, WHICH IS DETERMINED BY THE FLOW DISTRIBUTION CHARACTERISTICS AND MEDIA PLUGGING.

PUBLICATION DATE: JUL 86

TITLE: FATE OF NAPHTHALENE IN A ROTATING DISC BIOLOGICAL CONTACTOR.

PERSONAL AUTHOR: GLAZE, WILLIAM H. I AND OTHERS

DESCRIPTOR: \*BIOLOGICAL CONTACTORS; \*PETROLEUM; \*OIL REFINERIES; \*INDUSTRIAL WASTES; \*NAPHTHALENE; \*RESEARCH REPORTS; \*ROTATING BIOLOGICAL CONTACTORS; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 792-798P.

ABSTRACT: THIS PAPER DESCRIBES THE EFFECTIVENESS OF A ROTATING DISC BIOLOGICAL CONTACTOR FOR REMOVING NAPHTHALENE FROM REFINERY WASTEWATER.

AVAILABILITY: JOURNAL, WATER POLLUTION CONTROL FEDERATION; V58 N7

IRIS ACCESSION NUMBER: EW013627

PUBLICATION DATE: JUL 86

TITLE: FUNDAMENTALS PROCESS CONTROL PART III: MEASURING SLUDGE CONCENTRATION AND QUALITY.

PERSONAL AUTHOR: HOBSON, TIM

DESCRIPTOR: \*ACTIVATED SLUDGE; \*BACTERIA; \*MICROBIOLOGY; \*PROCESS CONTROL; \*OPERATIONS (WASTEWATER); \*SLUDGE; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 20-25P.

ABSTRACT: THIS IS THE THIRD ARTICLE IN A SERIES ON PROCESS CONTROL. THIS ARTICLE CONSIDERS METHODS OF MEASURING THE CONCENTRATION OF BACTERIA IN VARIOUS LOCATIONS IN THE ACTIVATED SLUDGE PLANTS, CALCULATION OF SOLIDS INVENTORIES, AND DETERMINING SLUDGE QUALITY.

AVAILABILITY: OPERATIONS FORUM; V3 N7

IRIS ACCESSION NUMBER: EW013628

PUBLICATION DATE: JUN 86

TITLE: REMEDIATION OF PCB CONTAMINATION IN THE KIWANIS PAR SECTION OF POTTERSBURG CREEK, LONDON, ONTARIO.

PERSONAL AUTHOR: RUSH, RICHARD J.; AND OTHERS

DESCRIPTOR: \*CANADA; \*CLEANUP; \*INDUSTRIAL WASTES; \*HAZARDOUS WASTES; \*PLANNING; \*REMEDIATION; \*PCBS; \*POLLUTION CONTROL

DESCRIPTIVE NOTE: 40-52P.

ABSTRACT: THIS PAPER FOCUSES ON REMEDIATION OF PCB CONTAMINATION OF CREEK BED SEDIMENTS AND FLOOD PLAIN SOIL IN A LARGE PARK IN ONTARIO, CANADA.

AVAILABILITY: SPILL TECHNOLOGY NEWSLETTER; V11 N2

IRIS ACCESSION NUMBER: EW013629

PUBLICATION DATE: JUN 86

TITLE: A PERSPECTIVE ON THE BEHAVIOUR OF CHEMICALS SPILLED IN SOIL.

PERSONAL AUTHOR: MACKAY, DON

DESCRIPTOR: CHEMICAL REACTIONS; \*CHEMICALS; \*CLEANUP; \*CONTAMINATION; \*HAZARDOUS MATERIALS; \*POLLUTION CONTROL; \*TOXIC SUBSTANCES; \*REMEDIATION; \*SOILS; WASTES

DESCRIPTIVE NOTE: 53-71P.

ABSTRACT: THIS PAPER PRESENTS A PERSPECTIVE ON THE ISSUE OF SOIL CONTAMINATION BY CHEMICALS. THE DISCUSSION CONSIDERS HOW SOIL SHOULD BE TREATED, TRANSPORT IN SOILS, CHEMICAL TRANSFORMATION IN SOILS, INTERVENTION TECHNIQUES, AND SOME CONCLUSIONS.

AVAILABILITY: SPILL TECHNOLOGY NEWSLETTER; V11 N2

IRIS ACCESSION NUMBER: EW013630

PUBLICATION DATE: JUL 86

TITLE: EMPLOYEE TRAINING IN AMERICA.

DESCRIPTOR: INSTRUCTION; INSTRUCTIONAL TECHNOLOGY; BUDGETS; NEEDS ASSESSMENT; \*PERSONNEL; \*CORPORATIONS; \*STAFF DEVELOPMENT; \*SURVEYS; \*TRAINING

DESCRIPTIVE NOTE: 34-37P.

ABSTRACT: REPORTED ARE THE RESULTS OF A SURVEY ON TRAINING AND DEVELOPMENT OF CORPORATE PERSONNEL. DATA ON NEEDS, BUDGETS, INSTRUCTIONAL TECHNOLOGY, INSTRUCTION, AND EVALUATION ARE INCLUDED.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V40 N7

IRIS ACCESSION NUMBER: EW013631

PUBLICATION DATE: JUL 86

TITLE: DOES YOUR CBT COURSE TEACH PERFORMANCE?

PERSONAL AUTHOR: COMEAU, B. J. (PERRY)

DESCRIPTOR: \*COMPUTERS; \*EVALUATION; \*INSTRUCTION; \*COMPUTER INSTRUCTION; \*PERFORMANCE EVALUATION; \*TRAINING

DESCRIPTIVE NOTE: 42-44P.

ABSTRACT: THIS ARTICLE PROVIDES SUGGESTIONS FOR EVALUATING COMPUTER-BASED TRAINING COURSES.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V40 N7

IRIS ACCESSION NUMBER: EW013632

PUBLICATION DATE: JUL 86

TITLE: 33 WAYS TO BETTER SOFTWARE DESIGN.

PERSONAL AUTHOR: KEARSLEY, GREG

DESCRIPTOR: \*COMPUTER SOFTWARE; \*DESIGN; \*INSTRUCTIONAL MATERIALS

DESCRIPTIVE NOTE: 47-48P.

ABSTRACT: DESCRIBED ARE A VARIETY OF WAYS TO IMPROVE SOFTWARE DESIGN.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V40 N7

IRIS ACCESSION NUMBER: EW013633

PUBLICATION DATE: JUL 86

TITLE: TOUCH-SENSITIVE COMPUTER TERMINAL UPDATE.

PERSONAL AUTHOR: MARINO, JOHN J.

DESCRIPTOR: \*COMPUTERS; \*COMPUTER APPLICATIONS; \*COMPUTER TERMINALS; TECHNOLOGY; \*TERMINALS; \*TOUCH-SENSITIVE TECHNOLOGY

DESCRIPTIVE NOTE: 52-54P.

ABSTRACT: DESCRIBED ARE TOUCH-SENSITIVE COMPUTER TERMINAL TECHNOLOGY AND APPLICATIONS.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V40 N7

IRIS ACCESSION NUMBER: EW013634  
PUBLICATION DATE: JUN 86

TITLE: CHEMICAL GROUTING OFFERS ALTERNATIVE FOR SERVICE LATERAL REPAIR.

PERSONAL AUTHOR: HAGAN, DAVID C., P.E.; ZIMMERMAN, ROBERT M., P.E.

DESCRIPTOR: \*CHEMICAL GROUTING; \*GROUTING; \*INFILTRATION; \*INFLOW; \*MAINTENANCE; \*ILLINOIS; \*SEWERS; \*SEWER LATERALS; \*WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 14-15P.

ABSTRACT: DESCRIBED IS A PROGRAM IN A VILLAGE OF ILLINOIS TO REDUCE INFILTRATION AND INFLOW IN SEWER SERVICE LATERALS BY USING CHEMICAL GROUTING.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V133 N6

IRIS ACCESSION NUMBER: EW013635

PUBLICATION DATE: JUN 86

TITLE: DUAL-USE FILTERS KEEP WET-WEATHER FLOWS UNDER CONTROL.

PERSONAL AUTHOR: CLAVEL, ROBERT L.; SCALISA, MICHAEL A.

DESCRIPTOR: \*FACILITIES; \*FILTERS; \*SAND FILTERS; \*TECHNOLOGY; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 33-35P.

ABSTRACT: INNOVATIVE/ALTERNATIVE TECHNOLOGY FUNDING HELPED A MIDWEST SANITARY DISTRICT UNDERTAKE AND COMPLETE A NEEDED EXPANSION. A DUAL APPLICATION OF RAPID SAND FILTERS ALLOWS THE FACILITY TO HANDLE WET WEATHER FLOW EXCESSES AND RETAIN CONTROL OF PLANT EFFLUENT QUALITY.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V133 N6

IRIS ACCESSION NUMBER: EW013636

PUBLICATION DATE: JUN 86

TITLE: SIZING SUBMERSIBLE PUMPS.

PERSONAL AUTHOR: MAURER, DAVID

DESCRIPTOR: \*EQUIPMENT; \*PUMPS; \*PUMP SELECTION; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 37-43P.

ABSTRACT: PROVIDED ARE ENGINEERING FACTS FOR SELECTION OF SUBMERSIBLE WASTEWATER PUMPS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V133 N6

IRIS ACCESSION NUMBER: EW013638

PUBLICATION DATE: JUL 86

TITLE: STOPPING ROOT INTRUSION IN SEWER SYSTEMS.

DESCRIPTOR: \*HERBICIDES; \*MAINTENANCE; \*ROOTS; \*SEWERS; \*WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 6-7P.

ABSTRACT: DESCRIBED ARE PROCEDURES FOR STOPPING ROOT INTRUSION IN SEWER SYSTEMS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V133 N7

IRIS ACCESSION NUMBER: EW013639

PUBLICATION DATE: JUL 86

TITLE: THE IMPORTANCE OF MAKING AND MANAGING IMAGE.

PERSONAL AUTHOR: HERSCHE, PAUL

DESCRIPTOR: \*IMAGE INDICATORS; \*MANAGEMENT; \*PUBLIC IMAGE; \*PUBLIC RELATIONS; \*PLANNING; \*SURVEYS; \*UTILITIES

DESCRIPTIVE NOTE: 13P.

ABSTRACT: DISCUSSED IS THE IMPORTANCE OF MAKING AND MANAGING A UTILITIES IMAGE.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V133 N7

IRIS ACCESSION NUMBER: EW013640

PUBLICATION DATE: JUL 86

TITLE: SCADA SYSTEMS TODAY AND TOMORROW.

PERSONAL AUTHOR: HEYWOOD, CHARLES H.

DESCRIPTOR: \*COMPUTER APPLICATIONS; \*DATA ACQUISITION; \*MANAGEMENT; \*PROCESS CONTROL; \*SUPERVISION; OPERATIONS (WASTEWATER); OPERATIONS (WATER); \*TECHNOLOGY; \*SCADA; WATER TREATMENT; WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 18-20P.

ABSTRACT: DISCUSSED ARE SUPERVISORY CONTROL AND DATA ACQUISITION SYSTEMS (SCADA) AND THEIR APPLICATIONS.

AVAILABILITY: WATER ENGINEERING MANAGEMENT; V133 N7

IRIS ACCESSION NUMBER: EW013641  
PUBLICATION DATE: JUL 86

TITLE: A COMPUTERIZED WATER SYSTEM: FROM PITFALLS TO PERFECTION.

PERSONAL AUTHOR: GREIF, TIM

DESCRIPTOR: \*COMPUTER APPLICATIONS; \*ILLINOIS; \*MANAGEMENT; \*OPERATIONS (WATER); \*PLANNING; \*WATER DISTRIBUTION; \*WATER TREATMENT

DESCRIPTIVE NOTE: 24-26P.

ABSTRACT: DESCRIBED IS A COMPUTERIZED WATER SYSTEM FOR AN ILLINOIS COMMUNITY.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V133 N7

IRIS ACCESSION NUMBER: EW013642

PUBLICATION DATE: JUL 86

TITLE: GROUND WATER PLAN HAS REGIONAL FOUNDATION.

PERSONAL AUTHOR: MOORHOUSE, JEANETTE L.

DESCRIPTOR: \*CALIFORNIA; \*GROUNDWATER; \*MANAGEMENT; \*PLANNING; \*REGIONAL PLANNING; \*WATER QUALITY; \*WATER QUALITY CONTROL BOARD; \*WATER RESOURCES

DESCRIPTIVE NOTE: 27-28P.

ABSTRACT: DESCRIBED IS CALIFORNIA'S GROUND WATER MANAGEMENT PLAN INVOLVING NINE GEOGRAPHIC REGIONS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V133 N7

IRIS ACCESSION NUMBER: EW013643

PUBLICATION DATE: JUL 86

TITLE: EVALUATING DISTRIBUTION SYSTEMS.

PERSONAL AUTHOR: STARP, MICHAEL

DESCRIPTOR: \*AUDIOVISUAL AIDS; \*COSTS; \*DISTRIBUTION; \*PRODUCTION; \*TRANSMISSION; \*VIDEODISCS; \*VIDEOTAPES

DESCRIPTIVE NOTE: 17-21P.

ABSTRACT: PRODUCTION IMPLICATIONS AND COST ARE TWO MAJOR VARIABLES IN DETERMINING DIFFERING MODES OF VIDEOTAPES DISTRIBUTION. DISCUSSED ARE VIDEOTAPES, VIDEODISCS, SATELLITE CONNECTIONS, MICROWAVE TRANSMISSION AND SMALL SCREEN DISTRIBUTION.

AVAILABILITY: E-I TV; V18 N7

IRIS ACCESSION NUMBER: EW013644  
PUBLICATION DATE: JUL 86

TITLE: POST PRODUCTION: MATCHING THE FORMAT TO THE FUNCTION.

PERSONAL AUTHOR: LANIER, ROBIN

DESCRIPTOR: \*AUDIOVISUAL AIDS; \*POSTPRODUCTION; \*PRODUCTION; \*VIDEODISCS; \*VIDEOTAPES

DESCRIPTIVE NOTE: 23-25P.

ABSTRACT: DISCUSSED ARE TECHNIQUES FOR VARIOUS FORMATS FOR AUDIOVISUAL AIDS.

AVAILABILITY: E-I TV; V18 N7

IRIS ACCESSION NUMBER: EW013645

PUBLICATION DATE: JUL 86

TITLE: EVALUATING PRODUCTION OPTIONS: FROM JUMP STREET.

PERSONAL AUTHOR: HAWTHORNE, DAVID L.

DESCRIPTOR: \*AUDIOVISUAL AIDS; \*POSTPRODUCTION; \*PRODUCTION; \*VIDEOTAPES

DESCRIPTIVE NOTE: 28-31P.

ABSTRACT: DESCRIBED ARE VARIOUS OPTIONS FOR THE PRODUCTION OF VISUAL AIDS.

AVAILABILITY: E-I TV; V18 N7

IRIS ACCESSION NUMBER: EW013646

PUBLICATION DATE: JUL 86

TITLE: INTERFORMAT VIDEO EDITING.

PERSONAL AUTHOR: JACOBSON, DAVID

DESCRIPTOR: \*AUDIOVISUAL AIDS; \*EDITING; \*INTERFORMAT EDITING; \*PRODUCTION; \*VIDEOTAPES

DESCRIPTIVE NOTE: 42-45P.

ABSTRACT: DESCRIBED IS INTERFORMAT VIDEO EDITING.

AVAILABILITY: E-I TV; V18 N7

IRIS ACCESSION NUMBER: EW013647  
PUBLICATION DATE: AUG 86

TITLE: A COMPUTER HARDWARE PRIMER.

PERSONAL AUTHOR: KROON, JOSEPH R.; STRAYER, ROBERT F., JR.

DESCRIPTOR: \*COMPUTERS; \*COMPUTER APPLICATIONS; \*COMPUTER HARDWARE

DESCRIPTIVE NOTE: 38-35P.

ABSTRACT: THIS ARTICLE PROVIDES AN OVERVIEW OF AVAILABLE COMPUTER HARDWARE AND APPLICATIONS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V78 N8

IRIS ACCESSION NUMBER: EW013648

PUBLICATION DATE: AUG 86

TITLE: HONOLULU'S NEW SCADA SYSTEM.

PERSONAL AUTHOR: WADA, RONALD N.; AND OTHERS

DESCRIPTOR: \*COMPUTER APPLICATIONS; \*COMPUTER SOFTWARE; \*HAWAII; \*MANAGEMENT; \*OPERATIONS (WATER); \*SCADA; \*SUPERVISION; \*WATER DISTRIBUTION; \*WATER TREATMENT

DESCRIPTIVE NOTE: 43-48P.

ABSTRACT: DESCRIBED IS A COMPUTER SYSTEM FOR CONTROLLING PUMPING, STORAGE, AND DISTRIBUTION OPERATIONS IN HONOLULU, HAWAII.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V78 N8

IRIS ACCESSION NUMBER: EW013649

PUBLICATION DATE: AUG 86

TITLE: AUTOMATING WATER CONSUMPTION DATA MANIPULATION.

PERSONAL AUTHOR: HIRREL, TIMOTHY D.

DESCRIPTOR: \*COMPUTER APPLICATIONS; \*COMPUTER SOFTWARE; \*PLANNING; \*WASHINGTON D. C.; \*WATER CONSUMPTION; \*WATER DISTRIBUTION

DESCRIPTIVE NOTE: 49-52P.

ABSTRACT: WATER DEMAND SOFTWARE IS USED TO MODEL CONSUMPTION AND PROJECTED GROWTH DATA FOR THE WASHINGTON SUBURBAN SANITARY COMMISSION IN HYATTSVILLE, MD.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V78 N8

IRIS ACCESSION NUMBER: EW013650  
PUBLICATION DATE: AUG 86

TITLE: DEVELOPING AND APPLYING THE WATER SUPPLY SIMULATION MODEL.

PERSONAL AUTHOR: CLARK, ROBERT M.; MALES, RICHARD M.

DESCRIPTOR: \*COMPUTER APPLICATIONS; \*ECONOMICS; \*MANAGEMENT; \*OHIO; \*SIMULATIONS; \*WATER SUPPLY; \*WATER SUPPLY SIMULATION MODELS; \*WATER DISTRIBUTION; \*WATER TREATMENT

DESCRIPTIVE NOTE: 61-65P.

ABSTRACT: A SIMULATION MODEL WAS DESIGNED TO AID IN THE EVALUATION OF THE ECONOMICS OF REGIONALIZATION OF WATER SUPPLY IN OHIO.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V78 N8

IRIS ACCESSION NUMBER: EW013651

PUBLICATION DATE: AUG 86

TITLE: AMENDED SDWA MARKS NEW ERA IN THE WATER INDUSTRY.

PERSONAL AUTHOR: COOK, MICHAEL B.; SCHNARE, DAVID W.

DESCRIPTOR: \*COMPLIANCE; \*AMENDMENTS; \*DRINKING WATER; \*MONITORING; \*1986; \*SAFE DRINKING WATER ACT; \*STANDARDS; \*USEPA; \*WATER TREATMENT

DESCRIPTIVE NOTE: 66-69P.

ABSTRACT: THE 1986 AMENDMENTS TO THE SAFE DRINKING WATER ACT WILL BRING ABOUT MANY CHANGES IN WATER UTILITY MANAGEMENT AND OPERATIONS IN THE NEXT FEW YEARS. THE AUTHORS OUTLINE THE MANDATES OF CONGRESS AND THE GOALS OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY IN IMPLEMENTING THE NEW LEGISLATION.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V78 N8

IRIS ACCESSION NUMBER: EW013652

PUBLICATION DATE: JUN 86

TITLE: SYSTEMS ANALYSIS.

PERSONAL AUTHOR: RECKHOW, KENNETH H.

DESCRIPTOR: ASSESSMENT; \*LITERATURE; REVIEW; MODELING; \*MONITORING; \*OPERATIONS (WASTEWATER); \*OPERATIONS (WATER); \*STATE-OF-THE-ART REVIEWS; \*SYSTEMS ANALYSIS; WASTEWATER TREATMENT; \*WATER QUALITY; \*WATER RESOURCES

DESCRIPTIVE NOTE: 419-421P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO THE ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW ISSUE (EW 012 418). A DETAILED REVIEW OF THE LITERATURE IS PROVIDED FOR THE VARIOUS TOPICS RELATING TO SYSTEMS ANALYSIS AND WATER RESOURCES. TOPICS ADDRESSED INCLUDE UNCERTAINTY AND RISK, WATER QUALITY SIMULATION MODELS, WATER QUALITY MANAGEMENT MODELING, AND ACID DEPOSITION MODELING.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013653

PUBLICATION DATE: JUN 86

TITLE: ECONOMICS.

PERSONAL AUTHOR: ELLERBROCK, M. J.

DESCRIPTOR: \*COST-BENEFIT ANALYSIS; COSTS; \*ENVIRONMENTAL POLICY; \*ECONOMICS; \*LITERATURE REVIEWS; \*PUBLIC POLICY; \*POLICIES; \*WASTEWATER TREATMENT; \*WATER RESOURCES; \*WATER QUALITY; \*MANAGEMENT

DESCRIPTIVE NOTE: 421-424P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW ISSUE (EW 012 419). A DETAILED REVIEW OF THE LITERATURE IS PROVIDED FOR ECONOMICS AND WATER RESOURCES. SOME NEW APPROACHES TO ECONOMICS, MANAGEMENT, AND ENVIRONMENTAL POLICY ARE IDENTIFIED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013654

PUBLICATION DATE: JUN 86

TITLE: LAW.

PERSONAL AUTHOR: COX, WILLIAM E.

DESCRIPTOR: \*CLEAN WATER ACT; \*DRINKING WATER; \*ENVIRONMENTAL PROTECTION AGENCY; \*HAZARDOUS SUBSTANCES; \*LEGAL ASPECTS; \*LEGISLATION; \*LITERATURE REVIEWS; \*POLLUTION CONTROL; \*OPERATIONS (WASTEWATER); \*WATER QUALITY; \*WATER TREATMENT; \*WASTEWATER TREATMENT; \*ACID RAIN; NONPOINT POLLUTION

DESCRIPTIVE NOTE: 424-426P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW ISSUE (EW 012 420). A DETAILED REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO THE LEGAL ASPECTS OF POLLUTION CONTROL AND WATER QUALITY. TOPICS ADDRESSED INCLUDE HAZARDOUS WASTE MANAGEMENT, MARINE POLLUTION, TRANSBOUNDARY POLLUTION, AND THE CLEAN WATER ACT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013655

PUBLICATION DATE: JUN 86

TITLE: INORGANICS.

PERSONAL AUTHOR: EATON, ANDREW D.

DESCRIPTOR: \*ANALYTICAL TECHNIQUES; \*CHEMICALS; \*DATA ANALYSIS; \*INORGANIC COMPOUNDS; \*LABORATORY PROCEDURES; \*LITERATURE REVIEWS; \*METALS; \*SAMPLING; \*TRACE METALS; \*WATER QUALITY; \*CHEMICAL ANALYSIS

DESCRIPTIVE NOTE: 427-449P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO THE ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 421). A LISTING OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO INORGANIC SUBSTANCES. TABLES TO VARIOUS REFERENCES ARE INCLUDED FOR THE FOLLOWING: (1) QUALITY ASSURANCE; (2) PRECONCENTRATION AND PRE-ANALYSIS; (3) SPECIATION INFORMATION; (4) CHROMATOGRAPHIC TECHNIQUES; (5) SPECTROPHOTOMETRY; (6) AAS/ICP/OES/ATOMIC FLUORESCENCE; (7) ELECTROCHEMICAL TECHNIQUES; (8) POLAROGRAPHY, VOLTAMMETRY; (9) XPF/PIXE; (10) FLOW INJECTION ANALYSIS (FIA); (11) OTHER INSTRUMENTAL ANALYSES; AND (12) INDIVIDUAL SPECIES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013656

PUBLICATION DATE: JUN 86

TITLE: ORGANICS.

PERSONAL AUTHOR: ADAMS, V. DEAN; AND OTHERS

DESCRIPTOR: \*ANALYTICAL TECHNIQUES; CHEMICAL ANALYSIS; DETERGENTS; \*HAZARDOUS; \*LITERATURE REVIEWS; \*ORGANIC COMPOUNDS; \*PESTICIDES; \*RESEARCH REPORTS; \*WATER; \*WASTEWATER; \*WATER SUPPLY

DESCRIPTIVE NOTE: 449-471P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 422). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO ORGANIC COMPOUNDS. TOPICS ADDRESSED INCLUDE: (1) TOTAL ORGANIC DETERMINATION; (2) DETERGENTS; (3) ALIPHATIC AND AROMATIC HYDROCARBONS; (4) PESTICIDES, CHLORINATED HYDROCARBONS, AND RELATED COMPOUNDS; (5) NATURALLY OCCURRING ORGANICS; AND (6) IDENTIFICATION OF ORGANICS. A DETAILED BIBLIOGRAPHY IS INCLUDED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013657

PUBLICATION DATE: JUN 86

TITLE: WATER CHARACTERISTICS.

PERSONAL AUTHOR: BANDY, JOHN T.

DESCRIPTOR: \*ANALYTICAL TECHNIQUES; COLOR; \*LITERATURE REVIEWS; RADIOACTIVITY; \*RESEARCH REPORTS; \*WATER CHARACTERISTICS; \*WATER QUALITY; ODOR; ACID RAIN

DESCRIPTIVE NOTE: 471-475P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 423). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO WATER CHARACTERISTICS. TOPICS INCLUDED ARE ACID PRECIPITATION, SALINITY, AND RADIONUCLIDES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013658

PUBLICATION DATE: JUN 86

TITLE: CONTINUOUS MONITORING, AUTOMATED ANALYSIS, AND SAMPLING PROCEDURES.

PERSONAL AUTHOR: JOLLEY, R. L.; PITI, W. W., JR.

DESCRIPTOR: \*ANALYTICAL TECHNIQUES; \*AUTOMATED ANALYSIS; \*CONTINUOUS MONITORING; \*INSTRUMENTATION; \*MONITORING; \*SAMPLING; \*WASTEWATER; \*WATER QUALITY

DESCRIPTIVE NOTE: 476-478P.

ABSTRACT: THIS ARTICLE, AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 424), CONSIDERS LITERATURE RELATED TO MONITORING, ANALYSIS, AND SAMPLING PROCEDURES OF WASTEWATER.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013659

PUBLICATION DATE: JUN 86

TITLE: WASTEWATER COLLECTION.

PERSONAL AUTHOR: HOLLOWBECK, ALAN J.

DESCRIPTOR: \*DESIGN; \*CONSTRUCTION; \*FACILITIES; \*LITERATURE REVIEWS; \*MAINTENANCE; \*RESEARCH REPORTS; \*REHABILITATION; \*SAFETY; \*SEWERS; \*WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 479-481P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE (EW 012 425). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO WASTEWATER COLLECTION. TOPICS ADDRESSED INCLUDE (1) PLANNING, DESIGN, AND CONSTRUCTION; (2) SEWER SYSTEM EVALUATION; (3) REHABILITATION; (4) SAFETY; AND (5) MAINTENANCE AND PUMPING.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013660

PUBLICATION DATE: JUN 86

TITLE: WASTEWATER TREATMENT - PHYSICAL AND CHEMICAL METHODS.

PERSONAL AUTHOR: PETERS, ROBERT W.; AND OTHERS

DESCRIPTOR: ADSORPTION; \*CHEMICAL TREATMENT; COAGULATION; ION EXCHANGE; \*LITERATURE REVIEWS; MEMBRANE PROCESSES; \*OPERATIONS (WASTEWATER); OXIDATIVE PROCESSES; \*PHYSICAL TREATMENT; \*RESEARCH REPORTS; SOLIDS SEPARATION; \*TECHNOLOGY; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 481-498P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 426). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO PHYSICAL AND CHEMICAL METHODS OF WASTEWATER TREATMENT. TOPICS ADDRESSED INCLUDE PROCESS TECHNOLOGY, MIXING, FLUID FLOW, PRECIPITATION, COAGULATION, SOLID-LIQUID SEPARATION, ADSORPTION, ION EXCHANGE, SEPARATION PROCESSES, CORROSION CONTROL, OXIDATIVE PROCESSES, AND MEMBRANE PROCESSES. AN EXTENSIVE BIBLIOGRAPHY IS INCLUDED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013661

PUBLICATION DATE: JUN 86

TITLE: ACTIVATED SLUDGE.

PERSONAL AUTHOR: ALLEMAN, J. E.; AND OTHERS

DESCRIPTOR: \*ACTIVATED SLUDGE; DESIGN; INDUSTRIAL WASTES; INSTRUMENTATION; \*LITERATURE REVIEWS; MODELING; NITROGEN; PROCESS CONTROL; OXYGEN UPTAKE; \*OPERATIONS (WASTEWATER); \*RESEARCH REPORTS; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 498-498P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 427). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO ACTIVATED SLUDGE. TOPICS ADDRESSED INCLUDE PROCESS MODELING, PROCESS RESEARCH, DESIGN AND PERFORMANCE, PROCESS CONTROL,

INDUSTRIAL WASTEWATER, NITROGEN METABOLISM, AND OXYGEN UPTAKE AND OXYGEN TRANSFER. AN EXTENSIVE BIBLIOGRAPHY IS INCLUDED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V50 N6

IRIS ACCESSION NUMBER: EW013662

PUBLICATION DATE: JUN 86

TITLE: BIOLOGICAL FIXED-FILM SYSTEMS.

PERSONAL AUTHOR: KINNER, N. E.; EIGHMY, T. T.

DESCRIPTOR: \*BIOLOGICAL CONTACTORS; \*BIOLOGICAL FIXED-FILM SYSTEMS; \*FACILITIES; \*LITERATURE REVIEWS; \*OPERATIONS (WASTEWATER); \*RESEARCH; \*TRICKLING FILTERS; \*WASTEWATER TREATMENT; \*ROTATING BIOLOGICAL CONTACTORS

DESCRIPTIVE NOTE: 498-501P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 428). THE ARTICLE REVIEWS LITERATURE RELATED TO BIOLOGICAL FIXED-FILM SYSTEMS FOR WASTEWATER. TOPICS COVERED INCLUDE ROTATING BIOLOGICAL CONTACTORS, TRICKLING FILTERS, FLUIDIZED BED REACTORS, AND BIOFILM RESEARCH.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013663

PUBLICATION DATE: JUN 86

TITLE: LAGOONS, PONDS, AND AEROBIC DIGESTION.

PERSONAL AUTHOR: BRYANT, CURTIS W.

DESCRIPTOR: \*DESIGN; \*FACILITIES; \*LAGOONS; \*LITERATURE REVIEWS; MODELS; \*OXIDATION PONDS; \*PERFORMANCE EVALUATION; \*PROCESS CONTROL; OPERATIONS (WASTEWATER); \*RESEARCH REPORTS; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 501-504P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 429). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO LAGOONS AND OXIDATION PONDS. TOPICS ADDRESSED INCLUDE PROCESS PERFORMANCE, BIOLOGY, AND AEROBIC DIGESTION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013664

PUBLICATION DATE: JUN 86

TITLE: ANAEROBIC PROCESSES.

PERSONAL AUTHOR: FANNIN, KERBY F.

DESCRIPTOR: \*ANAEROBIC DIGESTION; \*LITERATURE REVIEWS; MICROBIOLOGY; \*OPERATIONS (WASTEWATER); PERFORMANCE EVALUATION; PROCESS DESCRIPTIONS; \*RESEARCH REPORTS; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 504-510P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO THE ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 430). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO ANAEROBIC PROCESSES. TOPICS ADDRESSED INCLUDE MICROBIOLOGY, PROCESS EVALUATION AND CONTROL, AND PROCESS APPLICATION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013665

PUBLICATION DATE: JUN 86

TITLE: SLUDGE TREATMENT, UTILIZATION, AND DISPOSAL.

PERSONAL AUTHOR: HASIT, YAKIR

DESCRIPTOR: \*DEWATERING; \*LITERATURE REVIEWS; \*RESEARCH REPORTS; \*SLUDGE STABILIZATION; \*SLUDGE TREATMENT; \*SLUDGE UTILIZATION; \*WASTE DISPOSAL; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 510-518P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 431). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO SLUDGE TREATMENT. TOPICS ADDRESSED INCLUDE SLUDGE PROPERTIES, THICKENING, CONDITIONING, DEWATERING, STABILIZATION AND INACTIVATION, THERMAL PROCESSES, AND DISPOSAL AND USE.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013666

PUBLICATION DATE: JUN 86

TITLE: DISINFECTION.

PERSONAL AUTHOR: VENOSA, ALBERT D.; ISAAC, RUSSELL

DESCRIPTOR: \*ANALYTICAL TECHNIQUES; \*DISINFECTION; \*INORGANIC COMPOUNDS; \*LITERATURE REVIEWS; \*MICROBIOLOGY; \*OPERATIONS (WATER); \*OPERATIONS (WASTEWATER); \*ORGANIC COMPOUNDS; \*RESEARCH REPORTS; \*WATER QUALITY; \*WATER

TREATMENT; \*WASTEWATER TREATMENT  
DESCRIPTIVE NOTE: 518-527P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 812 433). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATED TO DISINFECTION. TOPICS ADDRESSED INCLUDE MICROBIOLOGY, ANALYTICAL PROCEDURES, FORMATION AND CONTROL BYPRODUCTS, AND OTHER CHEMISTRY.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW813667

PUBLICATION DATE: JUN 86

TITLE: OPTIMIZATION OF TREATMENT PLANT OPERATION.

PERSONAL AUTHOR: KUGELMAN, IRWIN M.; HOUTHOOFD, JANET M.

DESCRIPTOR: \*COMPUTER APPLICATION; \*INSTRUMENTATION; \*LITERATURE REVIEWS; \*MAINTENANCE; \*MODELING; \*OPERATIONS (WASTEWATER); \*RESEARCH REPORTS; \*TECHNOLOGICAL ADVANCEMENTS; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 527-529P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 812 434). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATED TO OPTIMIZATION OF TREATMENT PLANT OPERATION. TOPICS ADDRESSED INCLUDE PROCESS CONTROL AND MODELING, INSTRUMENTATION, OPERATIONS AND MAINTENANCE, AND TRAINING.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW813668

PUBLICATION DATE: JUN 86

TITLE: WASTEWATER RECLAMATION AND REUSE.

PERSONAL AUTHOR: ASANO, TAKASHI

DESCRIPTOR: AGRICULTURE; \*COMMERCIAL WATER USE; \*DOMESTIC WATER USE; GROUNDWATER; \*INDUSTRY; IRRIGATION; \*LITERATURE REVIEWS; \*RECYCLING; \*RESEARCH REPORTS; TECHNOLOGY; \*WATER TREATMENT; \*WASTEWATER TREATMENT; \*WATER QUALITY; \*WATER RECLAMATION; \*WATER RESOURCES; \*WATER REUSE

DESCRIPTIVE NOTE: 629-532P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 812 435). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATED TO WATER RECLAMATION AND REUSE. TOPICS ADDRESSED INCLUDE WATER REUSE PLANNING, GROUNDWATER RECHARGE, INDUSTRIAL WATER REUSE,

DOMESTIC REUSE, AND TECHNOLOGY DEVELOPMENT.  
AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

42

IRIS ACCESSION NUMBER: EW813669

PUBLICATION DATE: JUN 86

TITLE: LAND APPLICATION OF WASTEWATER.

PERSONAL AUTHOR: ZIRSCHKY, JOHN; AND OTHERS

DESCRIPTOR: \*LAND APPLICATION; \*LITERATURE REVIEWS; \*OPERATIONS (WASTEWATER); \*RESEARCH REPORTS; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 532-534P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 812 436). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATED TO LAND APPLICATION OF WASTEWATERS. TOPICS ADDRESSED INCLUDE RAPID INFILTRATION, OVERLAND FLOW, AND SLOW RATE APPLICATION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW813670

PUBLICATION DATE: JUN 86

TITLE: URBAN RUNOFF AND COMBINED SEWER OVERFLOW.

PERSONAL AUTHOR: DEGUIDA, RICHARD N.; CLARKSON, ROBERT A.

DESCRIPTOR: \*COMBINED SEWERS; DESIGN; \*HYDROLOGY; \*LITERATURE REVIEWS; \*MANAGEMENT; \*RESEARCH REPORTS; \*SEWERS; \*STORMWATER; \*SURFACE RUNOFF; \*URBAN AREAS; \*WASTEWATER COLLECTION; WASTEWATER TREATMENT; \*WATER QUALITY

DESCRIPTIVE NOTE: 534-539P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 812 437). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATED TO URBAN RUNOFF AND COMBINED SEWER OVERFLOW. TOPICS ADDRESSED INCLUDE HYDROLOGY, RECEIVING WATER, CONTROL AND TREATMENT, MANAGEMENT, RUNOFF QUALITY, AND RECEIVING WATER IMPACTS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW813671

PUBLICATION DATE: JUN 86

TITLE: HEALTH EFFECTS ASSOCIATED WITH WASTEWATER TREATMENT

AND DISPOSAL.

PERSONAL AUTHOR: CLARK, C. S.

DESCRIPTOR: \*AQUACULTURE; \*COMPOSTING; \*HEALTH EFFECTS; \*LAND APPLICATION; \*LITERATURE REVIEWS; \*PUBLIC HEALTH; \*RESEARCH REPORTS; \*SLUDGE; \*WASTE DISPOSAL; \*WASTEWATER TREATMENT; \*RECYCLING

DESCRIPTIVE NOTE: 539-543P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 438). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO HEALTH EFFECTS ASSOCIATED WITH WASTEWATER TREATMENT AND DISPOSAL. TOPICS ADDRESSED INCLUDE WASTEWATER TREATMENT PLANTS AND COLLECTION SYSTEMS, LAND APPLICATION OF WASTEWATER AND SLUDGE, WASTEWATER REUSE, AND HAZARDOUS WASTES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013672

PUBLICATION DATE: JUN 86

TITLE: ON-SITE ALTERNATIVES FOR TREATMENT AND DISPOSAL.

PERSONAL AUTHOR: DEESE, PATRICIA L.; JOHN, STEPHEN F.

DESCRIPTOR: \*ALTERNATIVE TECHNOLOGY; \*APPROPRIATE TECHNOLOGY; \*DESIGN; \*OPERATIONS (WASTEWATER); \*ONSITE DISPOSAL; \*PERFORMANCE EVALUATION; \*SITE SELECTION; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 543-547P.

ABSTRACT: THIS ARTICLE PRESENTS A REVIEW OF THE LITERATURE RELATED TO ON-SITE ALTERNATIVES FOR TREATMENT AND DISPOSAL. TOPICS ADDRESSED INCLUDE DESIGN AND SITING, PERFORMANCE, ALTERNATIVE SYSTEMS, AND COMMUNITY SYSTEMS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013673

PUBLICATION DATE: JUN 86

TITLE: MEAT, FISH AND POULTRY PROCESSING WASTES.

PERSONAL AUTHOR: MCCOMIS, WILLIAM T.; LITCHFIELD, JOHN H.

DESCRIPTOR: \*FISH; \*INDUSTRIAL WASTES; \*LITERATURE REVIEWS; \*HEAT; \*POULTRY; \*WASTE DISPOSAL; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 549-552P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 439). A REVIEW OF THE

LITERATURE IS PROVIDED FOR TOPICS RELATING TO MEAT, FISH, AND POULTRY PROCESSING WASTES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013674

PUBLICATION DATE: JUN 86

TITLE: FRUIT, GRAIN, AND VEGETABLE WASTES.

PERSONAL AUTHOR: MORRELL, ROBERT A.; SCHMIDT, HAROLD E., JR.

DESCRIPTOR: \*AGRICULTURAL WASTES; \*FRUITS; \*GRAINS; \*INDUSTRIAL WASTES; \*LITERATURE REVIEWS; \*RESEARCH REPORTS; \*VEGETABLES; \*WASTE DISPOSAL; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 552-554P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 440). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO FRUIT, VEGETABLE, AND GRAIN PROCESSING WASTES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013675

PUBLICATION DATE: JUN 86

TITLE: FERMENTATION INDUSTRY.

PERSONAL AUTHOR: CHIESA, STEVEN C.; MANNING, JOHN, JR.

DESCRIPTOR: \*FERMENTATION; \*INDUSTRIAL WASTES; \*LITERATURE REVIEWS; \*RESEARCH REPORTS; \*WASTE DISPOSAL; \*WASTE RECOVERY; \*WASTEWATER RECOVERY; \*WASTEWATER RECYCLING; \*WASTEWATER REUSE; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 554-555P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 441). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO THE FERMENTATION INDUSTRY. TOPICS ADDRESSED INCLUDE BREWERIES, PHARMACEUTICALS, AND DISTILLERIES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013676

PUBLICATION DATE: JUN 86

TITLE: DAIRY WASTES.

PERSONAL AUTHOR: PICO, RICHARD F.

DESCRIPTOR: \*AGRICULTURAL WASTES; \*CASE STUDIES; \*DAIRY WASTES; \*INDUSTRIAL WASTES; \*LITERATURE REVIEWS; \*RESEARCH REPORTS; \*WASTE DISPOSAL; \*WASTEWATER TREATMENT; \*MANAGEMENT; \*REGULATIONS

DESCRIPTIVE NOTE: 556-557P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 442). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO DAIRY WASTES. TOPICS ADDRESSED INCLUDE CASE HISTORIES, GOVERNMENT REGULATIONS, AND RESEARCH.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013677

PUBLICATION DATE: JUN 86

TITLE: AGRICULTURAL WASTES.

PERSONAL AUTHOR: HILTON, B. L.; AND OTHERS

DESCRIPTOR: \*AGRICULTURAL WASTES; \*BIOLOGICAL TREATMENT; \*CHEMICAL TREATMENT; \*ECONOMICS; \*LITERATURE REVIEWS; \*INDUSTRIAL WASTES; \*MANAGEMENT; \*RESEARCH REPORTS; \*WASTE DISPOSAL; \*WASTE TREATMENT; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 557-561P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 443). THE ARTICLE REVIEWS LITERATURE ON AGRICULTURE WASTES. TOPICS CONSIDERED INCLUDE WASTE CHARACTERIZATION, ANAEROBIC TREATMENT, CHEMICAL TREATMENT, AEROBIC TREATMENT, COMPUTER MODELS, ENERGY CONVERSION, LAND DISPOSAL AND COMPOSTING, CONTROL OF PATHOGENS, AND ECONOMICS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013678

PUBLICATION DATE: JUN 86

TITLE: TEXTILE WASTES.

PERSONAL AUTHOR: GROFF, KIMBERLY A.; KIM, BYUNG R.

DESCRIPTOR: \*INDUSTRIAL WASTES; \*LITERATURE REVIEWS; \*RESEARCH REPORTS; \*TEXTILES; \*WASTE DISPOSAL; \*WASTE RECOVERY; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 561-564P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 444). A REVIEW OF THE

LITERATURE IS PROVIDED FOR TOPICS RELATING TO TEXTILE WASTEWATER.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013679

PUBLICATION DATE: JUN 86

TITLE: PULP AND WATER EFFLUENT MANAGEMENT.

PERSONAL AUTHOR: GILLESPIE, WILLIAM J.

DESCRIPTOR: BIOLOGICAL TREATMENT; \*EFFLUENTS; \*FOREST PRODUCTS; \*INDUSTRIAL WASTES; \*LITERATURE REVIEWS; \*MANAGEMENT; \*OPERATIONS (WASTEWATER); \*PAPER INDUSTRY; \*PULP INDUSTRY; \*RESEARCH REPORTS; \*WASTE DISPOSAL; \*WASTE

DESCRIPTIVE NOTE: 564-566P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 445). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO PULP AND PAPER EFFLUENT MANAGEMENT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013680

PUBLICATION DATE: JUN 86

TITLE: COAL AND COAL MINE DRAINAGE.

PERSONAL AUTHOR: BETSON, ROGER P.

DESCRIPTOR: \*COAL; \*COAL CLEANING; \*COAL INDUSTRY; \*COAL MINE DRAINAGE; \*ENVIRONMENTAL IMPACTS; \*INDUSTRIAL WASTES; \*LITERATURE REVIEWS; \*MINING; \*POLLUTION CONTROL; \*RESEARCH REPORTS; \*STORAGE; \*TRANSPORTATION; \*WASTE DISPOSAL; \*WASTEWATER TREATMENT; \*REGULATIONS

DESCRIPTIVE NOTE: 566-571P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 446). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO COAL AND COAL MINE DRAINAGE. TOPICS ADDRESSED INCLUDE COAL MINING, COAL CLEANING, TRANSPORTATION AND STORAGE, AND REGULATIONS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013681  
PUBLICATION DATE: JUN 86

TITLE: PETROLEUM PROCESSING AND SYNTHETIC FUELS.

PERSONAL AUTHOR: COWAN, BRENT W.; STOVER, ENOS L.

DESCRIPTOR: \*ALTERNATIVE TECHNOLOGY; \*EFFLUENTS; \*ENVIRONMENTAL IMPACTS; \*INDUSTRIAL WASTES; \*LITERATURE REVIEWS; \*PETROLEUM; \*RESEARCH REPORTS; \*SYNTHETIC FUELS; \*WASTE DISPOSAL; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 571-574P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 447). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO PETROLEUM PROCESSING AND SYNTHETIC FUELS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013682

PUBLICATION DATE: JUN 86

TITLE: POWER INDUSTRY WASTES.

PERSONAL AUTHOR: IWANSKI, MYRON L.; CHU, T. JULIAN

DESCRIPTOR: \*ENERGY; FLUIDIZED-BED COMBUSTION; FOSSIL FUELS; \*INDUSTRIAL WASTES; \*LITERATURE REVIEWS; \*NUCLEAR POWER; \*POWER PRODUCTION; \*POWER INDUSTRY; REGULATIONS; \*RESEARCH REPORTS; \*WASTE TREATMENT; \*WASTEWATER TREATMENT.

DESCRIPTIVE NOTE: 574-586P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 448). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATED TO POWER INDUSTRY WASTES. TOPICS ADDRESSED INCLUDE ENVIRONMENTAL REGULATION, HYDROELECTRIC POWER PLANTS, FOSSIL-FUELED POWER PLANTS, NUCLEAR POWER PLANTS, AND FLUIDIZED BED COMBUSTION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013683

PUBLICATION DATE: JUN 86

TITLE: ELECTROPLATING, METAL FINISHING, AND CYANIDE WASTES.

PERSONAL AUTHOR: HIGGINS, THOMAS E.; DESHER, DREW P.

DESCRIPTOR: \*CYANIDE; \*ELECTROPLATING; \*HEAVY METALS; \*INDUSTRIAL WASTES; \*LITERATURE REVIEWS; \*POLLUTION CONTROL; \*REGULATIONS; \*RESEARCH REPORTS; \*SLUDGE; \*WASTE DISPOSAL; \*WASTEWATER TREATMENT; \*METALS

DESCRIPTIVE NOTE: 586-589P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 450). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO ELECTROPLATING AND CYANIDE WASTES. TOPICS ADDRESSED INCLUDE REGULATIONS, RECOVERY TECHNIQUES, HEAVY METALS TREATMENT, SLUDGE MANAGEMENT, AND CYANIDE TREATMENT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013684

PUBLICATION DATE: JUN 86

TITLE: CHEMICALS AND ALLIED PRODUCTS.

PERSONAL AUTHOR: DEL PINO, M. P.

DESCRIPTOR: \*BIOLOGICAL TREATMENT; \*CHEMICAL INDUSTRY; \*CHEMICALS; \*INDUSTRIAL WASTES; \*LITERATURE REVIEWS; \*POLLUTION CONTROL; \*RESEARCH REPORTS; \*WASTE DISPOSAL; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 589-594P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 451). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO CHEMICALS AND ALLIED PRODUCTS. TOPICS ADDRESSED INCLUDE WASTEWATER TREATMENT BY PRODUCT TYPE, BIOLOGICAL TREATMENT, AND PHYSICAL/CHEMICAL TREATMENT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013685

PUBLICATION DATE: JUN 86

TITLE: RADIOACTIVE WASTES.

PERSONAL AUTHOR: BOEGLY, W. J., JR.; ALEXANDER, H. J.

DESCRIPTOR: \*INDUSTRIAL WASTES; \*LITERATURE REVIEWS; \*MONITORING; \*NUCLEAR POWER; \*RADIOACTIVE MATERIALS; \*RADIOACTIVE WASTES; \*RESEARCH REPORTS; RISK ASSESSMENT; \*STORAGE; TRANSPORTATION; \*WASTE DISPOSAL; \*WASTE MANAGEMENT

DESCRIPTIVE NOTE: 594-600P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 452). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO RADIOACTIVE WASTES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V5, N6

IRIS ACCESSION NUMBER: EW013686

PUBLICATION DATE: JUN 86

TITLE: SOLID AND HAZARDOUS WASTES AND WATER QUALITY.

PERSONAL AUTHOR: TITTLEBAUM, M. E.

DESCRIPTOR: ENVIRONMENTAL IMPACTS; FACILITIES;  
\*GROUNDWATER; \*HAZARDOUS WASTES; \*INDUSTRIAL WASTES;  
\*LITERATURE REVIEWS; \*RESEARCH REPORTS; \*SOLID WASTES;  
\*WASTE DISPOSAL; \*WASTE MANAGEMENT; \*WASTE TREATMENT; \*WATER  
QUALITY; MONITORING

DESCRIPTIVE NOTE: 600-602P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 453). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO SOLID WASTES, HAZARDOUS WASTES AND WATER QUALITY.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION;  
V58 N6

IRIS ACCESSION NUMBER: EW013687

PUBLICATION DATE: JUN 86

TITLE: NONPOINT SOURCES.

PERSONAL AUTHOR: KENIMER, A. L.; AND OTHERS

DESCRIPTOR: \*LITERATURE REVIEWS; \*MANAGEMENT; \*MODELING;  
\*MONITORING; \*NONPOINT SOURCE POLLUTION; \*POLLUTION CONTROL;  
\*RESEARCH REVIEWS; \*WATER QUALITY; \*WATER POLLUTION

DESCRIPTIVE NOTE: 603-606P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 454). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO NON-POINT SOURCES. TOPICS ADDRESSED INCLUDE QUANTIFICATION, MODELING, AND MANAGEMENT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION;  
V58 N6

IRIS ACCESSION NUMBER: EW013688

PUBLICATION DATE: JUN 86

TITLE: MIXING AND TRANSPORT.

PERSONAL AUTHOR: ROBERTS, PHILIP J. W.

DESCRIPTOR: \*AQUATIC ENVIRONMENTS; \*ESTUARIES; \*LAKES;  
\*LITERATURE REVIEWS; \*POLLUTION CONTROL; \*RESEARCH REPORTS;  
\*RIVERS; \*WATER POLLUTION; \*WATER QUALITY

DESCRIPTIVE NOTE: 607-610P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 455). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO MIXING AND TRANSPORT. TOPICS ADDRESSED INCLUDE LAKES AND RESERVOIRS; ESTUARIES; COASTAL WATERS; JETS AND PLUMES; AND STRATIFIED FLOWS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION;  
V58 N6

IRIS ACCESSION NUMBER: EW013689

PUBLICATION DATE: JUN 86

TITLE: LAKE AND RESERVOIR MANAGEMENT.

PERSONAL AUTHOR: MEDINE, ALLEN J.; AND OTHERS

DESCRIPTOR: \*BIOLOGY; \*CHEMISTRY; \*ACID RAIN; \*LAKES;  
\*LABORATORY PROCEDURES; \*MANAGEMENT; \*MODELS; \*NUTRIENTS;  
\*RESERVOIRS; \*WATER POLLUTION CONTROL; \*WATER QUALITY

DESCRIPTIVE NOTE: 610-619P.

ABSTRACT: THIS REVIEW PRESENTS INFORMATION ON LAKE AND RESERVOIR MANAGEMENT. TOPICS ADDRESSED INCLUDE (1) NUTRIENTS; (2) EUTROPHICATION INDICATORS; (3) ECOSYSTEM MODELING; (4) BIOLOGICAL, CHEMICAL, AND PHYSICAL INTERACTIONS; (5) BIOASSAY AND LABORATORY STUDIES; (6) MANAGEMENT; AND (7) ACID RAIN.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION;  
V58 N6

IRIS ACCESSION NUMBER: EW013690

PUBLICATION DATE: JUN 86

TITLE: DISSOLVED OXYGEN IN STREAMS AND RESERVOIRS.

PERSONAL AUTHOR: POPPE, WAYNE L.

DESCRIPTOR: \*DESTRATIFICATION; \*DISSOLVED OXYGEN; \*GAS MEASUREMENT; \*GAS TRANSFER; \*LITERATURE REVIEWS; \*MODELING; \*REAERATION; \*RESEARCH REPORTS; \*RESERVOIRS; \*STREAMS; \*WASTEWATER; \*WATER QUALITY; \*MONITORING

DESCRIPTIVE NOTE: 619-621P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 456). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO DISSOLVED OXYGEN IN STREAMS AND RESERVOIRS. TOPICS ADDRESSED INCLUDE WATER QUALITY MODELS AND GAS TRANSFER, MONITORING, AND AQUATIC EFFECTS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION;  
V58 N6

IRIS ACCESSION NUMBER: EW013691  
PUBLICATION DATE: JUN 86

TITLE: GROUNDWATER QUALITY.

PERSONAL AUTHOR: NOSS, RICHARD R.

DESCRIPTOR: \*BIBLIOGRAPHIES; \*CONTAMINATION; \*GROUNDWATER; \*LITERATURE REVIEWS; \*MANAGEMENT; \*MONITORING; \*RESEARCH REPORTS; \*SAMPLING; \*WASTE DISPOSAL; \*WATER QUALITY; \*WATER RESOURCES

DESCRIPTIVE NOTE: 621-626P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 457). THE ARTICLE REVIEWS RESEARCH ON GROUNDWATER QUALITY. TOPICS ADDRESSED INCLUDE SPECIFIC CONTAMINANTS IN WATER, MONITORING, SAMPLING, POLLUTANT TRANSFORMATION, GROUNDWATER QUALITY MODELING, IMPACTS OF WASTE DISPOSAL, AND GROUNDWATER QUALITY MANAGEMENT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 NG

IRIS ACCESSION NUMBER: EW013692

PUBLICATION DATE: JUN 86

TITLE: THERMAL EFFECTS.

PERSONAL AUTHOR: HARRELSON, MICHAEL E.; CRAVENS, JOE BOB

DESCRIPTOR: \*ECOLOGY; \*ENVIRONMENTAL IMPACTS; \*LITERATURE REVIEWS; \*RESEARCH; \*RESEARCH REVIEWS; \*THERMAL POLLUTION; \*WATER QUALITY; \*WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 627-635P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 458). THIS ARTICLE REVIEWS LITERATURE ON THE EFFECTS OF THERMAL POLLUTION. INFORMATION DISCUSSED INCLUDES MODELS, SITE STUDIES, CONSUMERS, THERMAL TOLERANCE, AND OTHER ITEMS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 NG

IRIS ACCESSION NUMBER: EW013693

PUBLICATION DATE: JUN 86

TITLE: FATE OF POLLUTANTS.

PERSONAL AUTHOR: PRITCHARD, P. H.

DESCRIPTOR: \*CHEMICAL REACTIONS; \*ENVIRONMENTAL IMPACTS; \*HYDROCARBONS; \*LITERATURE REVIEWS; \*HEAVY METALS; \*ORGANIC COMPOUNDS; \*PESTICIDES; \*POLLUTION; \*RESEARCH; \*RESEARCH

REVIEWS; \*WATER POLLUTION CONTROL  
DESCRIPTIVE NOTE: 635-645P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 459). THIS ARTICLE REVIEWS RESEARCH ON THE FATE OF POLLUTANTS IN THE ENVIRONMENT. INFORMATION IS INCLUDED ON PESTICIDES, PETROLEUM HYDROCARBONS, CHLORINATED AROMATED HYDROCARBONS, POLYCYCLIC HYDROCARBONS, HEAVY METALS, AND OTHER ORGANIC COMPOUNDS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 NG

IRIS ACCESSION NUMBER: EW013694

PUBLICATION DATE: JUN 86

TITLE: EFFECTS OF POLLUTION ON FRESHWATER ORGANISMS.

PERSONAL AUTHOR: STEPHAN, CHARLES E.; AND OTHERS

DESCRIPTOR: \*AQUATIC ENVIRONMENTS; \*AQUATIC ORGANISMS; \*BIOLOGY; \*CHEMICALS; ECOLOGY; \*ENVIRONMENTAL IMPACTS; \*INVERTEBRATES; \*LITERATURE REVIEWS; \*FISH; INDUSTRIAL WASTES; \*PLANTS; RESEARCH; \*RESEARCH REVIEWS; \*VERTEBRATES; \*WATER QUALITY; \*WATER POLLUTION

DESCRIPTIVE NOTE: 645-671P.

ABSTRACT: THIS REVIEW IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 REVIEW (EW 012 460). THE REVIEW INCLUDES INFORMATION OF THE EFFECT OF POLLUTION ON PLANTS AND ANIMALS. EXTENSIVE LISTS ARE PROVIDED FOR VARIOUS CHEMICALS WITH REFERENCES TO ORGANISMS FOR EACH CHEMICAL. AN EXTENSIVE BIBLIOGRAPHY IS INCLUDED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 NG

IRIS ACCESSION NUMBER: EW013695

PUBLICATION DATE: JUN 86

TITLE: EFFECTS ON SALTWATER ORGANISMS.

PERSONAL AUTHOR: REISH, DONALD J.; AND OTHERS

DESCRIPTOR: \*EFFLUENTS; \*ESTUARIES; \*LITERATURE REVIEWS; \*MARINE ENVIRONMENTS; \*MICROBIOLOGY; \*OCEANS; \*OIL DRILLING; \*OIL SPILLS; \*PESTICIDES; \*POLLUTION CONTROL; \*RESEARCH REPORTS; \*WASTE DISPOSAL; \*WATER POLLUTION; \*WATER QUALITY

DESCRIPTIVE NOTE: 671-684P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 461). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO MARINE POLLUTION. TOPICS ADDRESSED INCLUDE PESTICIDES, RESIDUES,

SURVEYS, DISEASES, AND OIL POLLUTION. AN EXTENSIVE BIBLIOGRAPHY IS INCLUDED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V50 N6

IRIS ACCESSION NUMBER: EW013695

PUBLICATION DATE: JUN 86

TITLE: AQUATIC SEDIMENTS.

PERSONAL AUTHOR: LATHROP, JOYCE E.; DAVIS, WAYNE S.

DESCRIPTOR: \*ANALYTICAL TECHNIQUES; \*AQUATIC ENVIRONMENTS; \*HEAVY METALS; \*LITERATURE REVIEWS; \*MODELING; \*NUTRIENTS; \*ORGANIC COMPOUNDS; \*RESEARCH REPORTS; \*SAMPLING; \*SEDIMENTS; \*WATER POLLUTION; \*WATER QUALITY

DESCRIPTIVE NOTE: 684-699P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 464). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO AQUATIC SEDIMENTS. TOPICS ADDRESSED INCLUDE ANALYTICAL AND SAMPLING METHODS, BIOLOGICAL ACTIVITY, ORGANICS, NUTRIENTS, AND MODELING AND SEDIMENT TRANSPORT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013697

PUBLICATION DATE: JUN 86

TITLE: SUBSTRATE ASSOCIATED MICROFAUNA.

PERSONAL AUTHOR: LAZORCHAK, JAMES M.; AND OTHERS

DESCRIPTOR: \*ECOLOGY; \*ECOLOGICAL FACTORS; \*LITERATURE REVIEWS; \*MICROFAUNA; \*MICROBIOLOGY; \*RESEARCH REPORTS; \*WATER POLLUTION; \*WATER QUALITY

DESCRIPTIVE NOTE: 699-703P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 463). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO SUBSTRATE ASSOCIATED MICROFAUNA. TOPICS ADDRESSED INCLUDE METHODOLOGY AND ECOLOGY.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013698

PUBLICATION DATE: JUN 86

TITLE: HUMAN HEALTH EFFECTS ASSAYS.

PERSONAL AUTHOR: SIMS, RONALD C.; AND OTHERS

DESCRIPTOR: \*ASSAYS; \*CHEMICALS; \*ENVIRONMENTAL EFFECTS; \*HUMANS; \*LITERATURE REVIEWS; \*POLLUTION; \*PUBLIC HEALTH; \*RESEARCH; \*SAMPLING; \*RESEARCH REVIEWS; \*TESTING

DESCRIPTIVE NOTE: 703-717P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 464). THIS ARTICLE REVIEWS RESEARCH ON HUMAN HEALTH EFFECTS OF POLLUTANTS. SECTIONS INCLUDE TEST SYSTEMS, ENVIRONMENTAL SAMPLES, CHEMICALS, AND SPECIAL ASPECTS OF HEALTH EFFECTS ASSAYS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013699

PUBLICATION DATE: JUN 86

TITLE: DETECTION AND OCCURRENCE OF WATERBORN VIRUSES.

PERSONAL AUTHOR: BOARDMAN, GREGORY D.; EVANS, SHERI M.

DESCRIPTOR: \*ANALYTICAL TECHNIQUES; \*CONTAMINATION; \*LITERATURE REVIEWS; \*MICROBIOLOGY; \*PATHOGENS; \*RESEARCH REPORTS; \*WATER POLLUTION; \*WATER QUALITY; \*VIRUSES; \*HEALTH EFFECTS

DESCRIPTIVE NOTE: 717-721P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1985 LITERATURE REVIEW (EW 012 465). A REVIEW OF THE LITERATURE IS PROVIDED FOR THE DETECTION AND OCCURRENCE OF WATERBORNE VIRUSES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N6

IRIS ACCESSION NUMBER: EW013700

PUBLICATION DATE: SUM 86

TITLE: OPERATION AND MAINTENANCE OF UNDERGROUND INJECTION WELLS.

PERSONAL AUTHOR: BUTTRAM, JACK R.

DESCRIPTOR: \*LEAK DETECTION; \*MAINTENANCE; \*OPERATIONS (WASTE DISPOSAL); \*ENVIRONMENT; GROUNDWATER; \*UNDERGROUND INJECTION WELLS; \*WELLS; \*WASTE DISPOSAL; WATER QUALITY

DESCRIPTIVE NOTE: 64-67P.



ABSTRACT: DESCRIBED IS THE DUPONT CHEMICAL PLANT AT VICTORIA, TEXAS, THAT HAS USED UNDERGROUND INJECTION WELLS FOR 33 YEARS. THE EXPERIENCE GAINED AT THE VICTORIA PLANT PROVIDES AN EXAMPLE OF HOW PROPERLY SITED, BUILT, OPERATED AND MAINTAINED WELLS CAN OPERATE WITHOUT ENDANGERING HUMAN HEALTH AND THE ENVIRONMENT.

AVAILABILITY: GROUND WATER MONITORING REVIEW; V6 N3

IRIS ACCESSION NUMBER: EW013701

PUBLICATION DATE: SUM 86

TITLE: THEORY, CONSTRUCTION AND OPERATION OF SIMPLE TESIOMETERS.

PERSONAL AUTHOR: STANNARD, DAVID I.

DESCRIPTOR: \*ANALYTICAL TECHNIQUES; \*CONSTRUCTION; \*INSTALLATION; \*INSTRUMENTS; \*MAINTENANCE; \*OPERATIONS (WATER); \*GROUNDWATER; \*TESIOMETERS; \*WATER RESOURCES

DESCRIPTIVE NOTE: 70-78P.

ABSTRACT: DESCRIBED IS THE THEORY, CONSTRUCTION, AND OPERATION OF SIMPLE TESIOMETERS.

AVAILABILITY: GROUND WATER MONITORING REVIEW; V6 N3

DESCRIPTIVE NOTE: 158-159P.

ABSTRACT: DESCRIBED AND REVIEWED ARE COMPUTER SOFTWARE PROGRAMS FOR (1) PUMPING TEST ANALYSIS (PUMP) AND A WELL ECONOMICS GROUP CONSISTING OF THREE PROGRAMS. THE PROGRAMS ARE CONSIDERED USER-FRIENDLY, SIMPLE TO LEARN, AND SIMPLE TO USE.

AVAILABILITY: GROUND WATER MONITORING REVIEW; V6 N3

IRIS ACCESSION NUMBER: EW013704

PUBLICATION DATE: AUG 86

TITLE: FOUR BY FOUR: HOW CAN SUBJECT MATTER EXPERTS PREPARE THEMSELVES TO BE TRAINERS?

DESCRIPTOR: \*INSTRUCTION; \*NEEDS ASSESSMENT; \*RECOMMENDATIONS; \*TRAINERS; \*TRAINING

DESCRIPTIVE NOTE: 16-21P.

ABSTRACT: PRESENTED IS SOME ADVICE FOR SUBJECT MATTER EXPERTS WHO ARE REQUIRED TO BE TRAINERS. SUGGESTIONS ARE GIVEN ON HOW TO TRAIN TRAINERS AND WAYS TO MAKE TRAINING MORE EFFECTIVE.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V40 N8

IRIS ACCESSION NUMBER: EW013702

PUBLICATION DATE: SUM 86

TITLE: AN INEXPENSIVE FLOW-THROUGH CELL AND MEASUREMENT SYSTEM FOR MONITORING SELECTED CHEMICAL PARAMETERS IN GROUNDWATER.

PERSONAL AUTHOR: GARSKE, EDWARD E.; SCHOCK, MICHAEL R.

DESCRIPTOR: \*ANALYTICAL TECHNIQUES; \*CHEMICALS; \*GROUNDWATER; \*INSTRUMENTS; \*MEASUREMENT INSTRUMENTS; \*MEASUREMENT; \*MONITORING; \*PH; \*WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 79-84P.

ABSTRACT: DESCRIBED IS AN INEXPENSIVE FLOW-THROUGH CELL AND MEASUREMENT SYSTEM FOR MONITORING SELECTED CHEMICAL PARAMETERS IN GROUNDWATER.

IRIS ACCESSION NUMBER: EW013705

PUBLICATION DATE: AUG 86

TITLE: VIDEO TRAINING: THE STATE OF THE INDUSTRY.

PERSONAL AUTHOR: BOVE, ROBERT

DESCRIPTOR: \*AUDIOVISUAL AIDS; AUTHORIZING SOFTWARE; \*COMPUTER APPLICATIONS; \*INSTRUCTION; \*INTERACTIVE VIDEO INSTRUCTION; \*TRAINING; \*VIDEO TRAINING

DESCRIPTIVE NOTE: 27-29P.

ABSTRACT: DESCRIBED ARE SOME OF THE CHARACTERISTICS OF THE STATE-OF-THE-ART IN VIDEO TRAINING.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V40 N8

IRIS ACCESSION NUMBER: EW013703

PUBLICATION DATE: SUM 86

TITLE: GROUND WATER SOFTWARE REVIEW.

DESCRIPTOR: \*COMPUTER APPLICATIONS; \*COMPUTER SOFTWARE; \*COMPUTER SOFTWARE REVIEWS; \*ECONOMICS; \*PUMPS; \*PUMP TEST ANALYSIS; \*WELLS

82

IRIS ACCESSION NUMBER: EW013706

PUBLICATION DATE: AUG 86

TITLE: SIMPLE RULES FOR COMPLEX CHANGE.

PERSONAL AUTHOR: JOHNSON, HOMER H.; FREDIAN, ALAN J.

DESCRIPTOR: \*CHANGE PROCESS; \*GUIDELINES; \*MANAGEMENT; \*PLANNING; \*PLANS

83

6

DESCRIPTIVE NOTE: 47-49P.

ABSTRACT: PRESENTED ARE SOME KEY POINTS AND SIMPLE RULES THAT SHOULD BE FOLLOWED IN MANAGING COMPLEX ORGANIZATIONAL CHANGE.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V4# N8

IRIS ACCESSION NUMBER: EW#13707

PUBLICATION DATE: AUG 86

TITLE: CAN CONFLICTING VALUES ON THE CHANGE TEAM WORK?

PERSONAL AUTHOR: BARONE, FRANK J.

DESCRIPTOR: \*ATTITUDES; \*MANAGERS; \*ORGANIZATIONAL DEVELOPMENT; \*PRACTITIONERS; \*RESEARCH REPORTS; \*VALUES

DESCRIPTIVE NOTE: 50-51P.

ABSTRACT: DESCRIBED IS A STUDY THAT IDENTIFIED AND COMPARED THE SIMILARITIES AND DIFFERENCES IN VALUES OF ORGANIZATION DEVELOPMENT PRACTITIONERS AND MANAGERS.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V4# N8

IRIS ACCESSION NUMBER: EW#13708

PUBLICATION DATE: AUG 86

TITLE: SOME OBSERVATION ON TNA.

PERSONAL AUTHOR: SMITH, BARRY

DESCRIPTOR: \*DATA COLLECTION; \*DATA ANALYSIS; \*NEEDS ASSESSMENT; \*MODELS; \*TRAINING; \*TRAINING NEEDS ANALYSIS

DESCRIPTIVE NOTE: 63-68P.

ABSTRACT: THE AUTHORS EXAMINE SEVERAL REASONS WHY TRAINING NEEDS ANALYSIS (TNA) IS OFTEN A DIFFICULT PROCESS FOR TRAINERS AND PROPOSE A THREE-STAGE MODEL AND READING LIST TO ASSIST TRAINERS IN THEIR NEXT TNA EFFORT.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V4# N8

IRIS ACCESSION NUMBER: EW#13709

PUBLICATION DATE: AUG 86

TITLE: TRAINING THE TEAM.

PERSONAL AUTHOR: OBERHAMMER, MAUREEN

DESCRIPTOR: \*INSTRUCTION; \*MANAGEMENT; \*NEEDS ASSESSMENT; \*MODELS; \*TRAINING

DESCRIPTIVE NOTE: 70-72P.

ABSTRACT: DESCRIBED IS A MANAGEMENT TRAINING APPROACH IN WHICH MANAGERS ARE TRAINED WITH SUBORDINATES. THE MANAGER IS A PARTICIPANT, THE TRAINING ENVIRONMENT IS THE REAL WORLD, AND THE APPLICATION OF LEARNING IS IMMEDIATE.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V4# N8

IRIS ACCESSION NUMBER: EW#13712

PUBLICATION DATE: AUG 86

TITLE: PUMP PRIMER.

PERSONAL AUTHOR: SMITH, EARLE C.

DESCRIPTOR: \*EQUIPMENT; \*GAUGES; \*MAINTENANCE; \*OPERATIONS (WASTEWATER); \*PUMPS; \*WASTEWATER COLLECTION; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 11-17P.

ABSTRACT: THIS ARTICLE EXPLAINS HOW TO INSTALL AND USE GAUGES ON PUMP SYSTEMS. ALSO INCLUDED ARE OPERATION AND MAINTENANCE SUGGESTIONS.

AVAILABILITY: OPERATIONS FORUM; V3 N8

IRIS ACCESSION NUMBER: EW#13713

PUBLICATION DATE: AUG 86

TITLE: PROCESS CONTROL FUNDAMENTALS-PART IV. A \$5.00, 1-MINUTE EFFLUENT QUALITY TESTER.

PERSONAL AUTHOR: HOBSON, TIM

DESCRIPTOR: \*ANALYTICAL TECHNIQUES; EFFLUENT; \*EFFLUENT QUALITY; CLARIFIERS; \*OPERATIONS (WASTEWATER); SLUDGE; SLUDGE BLANKETS; \*WASTEWATER TREATMENT; \*WATER QUALITY

DESCRIPTIVE NOTE: 18-24P.

ABSTRACT: DESCRIBED ARE WAYS TO MEASURE CLARIFIER SLUDGE BLANKETS AND THE QUALITY OF PLANT EFFLUENT. USE OF A SIMPLE TOOL FOR TESTING EFFLUENT QUALITY IS SUGGESTED.

AVAILABILITY: OPERATIONS FORUM; V3 N8

IRIS ACCESSION NUMBER: EW#13714

PUBLICATION DATE: AUG 86

TITLE: INSTRUMENTATION: FOURIER TRANSFORMS FOR ANALYTICAL ATOMIC SPECTROSCOPY.

PERSONAL AUTHOR: FAIRES, LYNDY M.

DESCRIPTOR: \*ANALYTICAL TECHNIQUES; \*CHEMISTRY; \*FOURIER TRANSFORM SPECTRY; \*INSTRUMENTATION; \*LABORATORY PROCEDURES

DESCRIPTIVE NOTE: 1025A-1034AP.

ABSTRACT: PRESENTED IS AN INTRODUCTION TO FOURIER TRANSFORM SPECTROMETRY (FTS).

AVAILABILITY: ANALYTICAL CHEMISTRY; V58 N9

IRIS ACCESSION NUMBER: EW013715

PUBLICATION DATE: AUG 86

TITLE: REVIEW: INFRARED SPECTROMETRY.

PERSONAL AUTHOR: MCDONALD ROBERT S.

DESCRIPTOR: \*ANALYTICAL TECHNIQUES; \*BIBLIOGRAPHIES; \*CHEMISTRY; \*CHEMICAL ABSTRACTS; \*INFRARED SPECTROMETRY; \*LABORATORY PROCEDURES; \*SPECTROMETRY; \*LITERATURE REVIEWS; \*INSTRUMENTATION

DESCRIPTIVE NOTE: 1906-1925P.

ABSTRACT: THIS REVIEW COVERS THE LITERATURE CITED IN CHEMICAL ABSTRACTS FROM LATE 1983 TO LATE 1985 ON ASPECTS OF VIBRATIONAL IR SPECTROMETRY THAT ARE RELEVANT TO CHEMICAL ANALYSIS.

AVAILABILITY: ANALYTICAL CHEMISTRY; V58 N9

IRIS ACCESSION NUMBER: EW013716

PUBLICATION DATE: AUG 86

TITLE: REVIEW: CHEMICAL MICROSCOPY.

PERSONAL AUTHOR: COOKE, PETER M.

DESCRIPTOR: \*ANALYTICAL TECHNIQUES; \*BIBLIOGRAPHIES; \*CHEMISTRY; \*CHEMICAL ABSTRACTS; \*LABORATORY PROCEDURES; \*MICROSCOPY; \*INSTRUMENTATION; \*LITERATURE REVIEWS

DESCRIPTIVE NOTE: 1926-1937P.

ABSTRACT: THIS REVIEW COVERS PUBLICATIONS CITED IN CHEMICAL ABSTRACTS FROM JANUARY 1984 THROUGH DECEMBER 1985. THE REVIEW STRESSES ADVANCES IN MICROSCOPIC TECHNIQUES AND IN INSTRUMENTATION RELATED TO PRESENT OR POTENTIAL ANALYTICAL METHODS.

AVAILABILITY: ANALYTICAL CHEMISTRY; V58 N9

IRIS ACCESSION NUMBER: EW013717

PUBLICATION DATE: AUG 86

TITLE: INNOVATIVE LAGOONS LINER PAYS OFF.

PERSONAL AUTHOR: BAUER, BRADLEY E., P. E.; JEPSEN, CHRISTOPHER P., P. E.

DESCRIPTOR: \*COSTS; \*DESIGN; \*CONSTRUCTION; \*FACILITIES; \*LAGOONS; \*OPERATIONS (WASTEWATER); \*WASTEWATER TREATMENT; \*WYOMING

DESCRIPTIVE NOTE: 42-43P.

ABSTRACT: DESCRIBED IS THE DESIGN AND CONSTRUCTION OF A WASTEWATER LAGOON LINER FOR A SMALL COMMUNITY IN WYOMING.

AVAILABILITY: PUBLIC WORKS; V117 N8

IRIS ACCESSION NUMBER: EW013718

PUBLICATION DATE: AUG 86

TITLE: REVERSE OSMOSIS CAN BE COST EFFECTIVE.

PERSONAL AUTHOR: ASHTON, MARK

DESCRIPTOR: \*COSTS; \*DRINKING WATER; \*FACILITIES; \*FLORIDA; \*OPERATIONS (WATER); \*REVERSE OSMOSIS; \*WATER TREATMENT

DESCRIPTIVE NOTE: 55P.

ABSTRACT: DESCRIBED IS A REVERSE OSMOSIS WATER TREATMENT PLANT IN CAPE CORAL, FLORIDA.

AVAILABILITY: PUBLIC WORKS; V117 N8

IRIS ACCESSION NUMBER: EW013719

PUBLICATION DATE: AUG 86

TITLE: COST EFFICIENCY TAKES NO BACK SEAT TO PERFORMANCE.

DESCRIPTOR: \*CALIFORNIA; \*DESIGN; \*COSTS; \*FACILITIES; \*OPERATIONS (WASTEWATER); \*TERTIARY TREATMENT; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 60-62P.

ABSTRACT: DESCRIBED IS A TERTIARY WASTEWATER TREATMENT PLANT IN TRUCKEE, CALIFORNIA.

AVAILABILITY: PUBLIC WORKS; V117 N8

IRIS ACCESSION NUMBER: EW013720  
PUBLICATION DATE: AUG 86

TITLE: HOW TO RAISE A MANHOLE LID, SIMPLY.

PERSONAL AUTHOR: CURLES, LAWRENCE J., P. E.

DESCRIPTOR: \*CONSTRUCTION; \*INFILTRATION; \*MAINTENANCE; \*MANHOLES; \*MANHOLE COVERS; \*SEWERS; \*WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 67P.

ABSTRACT: DESCRIBED IS A SIMPLE PROCEDURE TO RAISE MANHOLE COVERS SO THAT THEY WILL NOT ACT AS STORM DRAINS.

AVAILABILITY: PUBLIC WORKS; V117 N8

IRIS ACCESSION NUMBER: EW013722

PUBLICATION DATE: AUG 86

TITLE: QUICK AREA MASKS FOR 35MM.

PERSONAL AUTHOR: JEGERINGS, RON

DESCRIPTOR: \*AREA MASKS; \*PHOTOGRAPHIC PRINTS; \*PHOTOGRAPHY; \*TECHNICAL PHOTOGRAPHY

DESCRIPTIVE NOTE: 47-49P.

ABSTRACT: DESCRIBED ARE PROCEDURES FOR MAKING AREA MASKS FOR 35MM. PRINTS.

AVAILABILITY: TECHNICAL PHOTOGRAPHY FOR INDUSTRIAL, MILITARY & GOVERNMENT STILL, CINE & AV PROFESSIONALS; V18 N8

IRIS ACCESSION NUMBER: EW013723

PUBLICATION DATE: AUG 86

TITLE: MARYLAND'S PHOSPHATE BAN - HISTORY AND EARLY RESULTS.

PERSONAL AUTHOR: JONES, EDGAR R.; HUBBARD, SUSAN D.

DESCRIPTOR: \*CHESAPEAKE BAY; \*CONTAMINATION; \*MARYLAND; \*PHOSPHORUS; \*REGULATIONS; \*WATER QUALITY; \*WATER RESOURCES; \*WATER POLLUTION CONTROL; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 816-822P.

ABSTRACT: THIS ARTICLE DESCRIBES MARYLAND'S PHOSPHATE BAN, SOME OF THE EARLY RESULTS OF THE BAN, EVENTS THAT PAVED THE WAY FOR THE BAN, AND WHY PHOSPHORUS OVER-ENVIRONMENT IS A PROBLEM OF CHESAPEAKE BAY.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N8

IRIS ACCESSION NUMBER: EW013724  
PUBLICATION DATE: AUG 86

TITLE: BIOLOGICAL PHOSPHORUS REMOVAL: A TECHNOLOGY EVALUATION.

PERSONAL AUTHOR: TETREAULT, MARK J.; AND OTHERS

DESCRIPTOR: \*BIOLOGICAL TREATMENT; \*ACTIVATED SLUDGE PROCESS; \*PHOSTrip; \*PERFORMANCE EVALUATION; \*PHOSPHORUS; \*PHOSPHORUS REMOVAL; \*RESEARCH; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 823-837P.

ABSTRACT: FIELD INVESTIGATIONS AT FOUR PLANTS SHOWED THAT NITRIFICATION AND DENITRIFICATION ARE COMPATIBLE WITH EFFLUENT PHOSPHORUS LEVELS OF 1 MG/L OR LESS.

AVAILABILITY: JOURNAL, WATER POLLUTION CONTROL FEDERATION, V58 N8

IRIS ACCESSION NUMBER: EW013725

PUBLICATION DATE: AUG 86

TITLE: NUTRIENT TRANSFORMATION IN RETENTION/DETENTION PONDS RECEIVING HIGHWAY RUNOFF.

PERSONAL AUTHOR: YOUSEF, YOUSEF A.; AND OTHERS

DESCRIPTOR: \*DETENTION PONDS; \*NUTRIENTS; \*NITROGEN; \*NONPOINT POLLUTION; \*PHOSPHORUS; \*RETENTION PONDS; \*SURFACE RUNOFF; \*WASTEWATER TREATMENT; \*WATER TREATMENT; \*HIGHWAYS

DESCRIPTIVE NOTE: 838-844P.

ABSTRACT: POND SEDIMENTS ACT AS A NUTRIENT SOURCE OR SINK, AND AN AEROBIC ENVIRONMENT AT THE WATER INTERFACE SHOULD ENHANCE PHOSPHORUS AND NITROGEN REMOVAL.

AVAILABILITY: JOURNAL, WATER POLLUTION CONTROL FEDERATION; V58 N8

IRIS ACCESSION NUMBER: EW013726

PUBLICATION DATE: AUG 86

TITLE: DEVELOPING MANAGEMENT GUIDELINES FOR RIVER NITROGENOUS OXYGEN DEMAND.

PERSONAL AUTHOR: COOPER, A. BRYCE

DESCRIPTOR: \*AMMONIA DISSOLVED OXYGEN; \*GUIDELINES; \*MODELS; \*MANAGEMENT; \*OXYGEN DEMAND; \*RIVERS; \*NITRIFICATION

DESCRIPTIVE NOTE: 845-852P.

ABSTRACT: APPLICATION OF REACTION-DIFFUSION MODELS SHOULD

BE USEFUL FOR PREDICTING THE RATE OF BENTHIC NITRIFICATION AND ITS EFFECT ON DISSOLVED OXYGEN LEVELS.

AVAILABILITY: JOURNAL, WATER POLLUTION CONTROL FEDERATION; V58 N8

IRIS ACCESSION NUMBER: EW013727

PUBLICATION DATE: AUG 86

TITLE: UPDATING THE SAFE DRINKING WATER ACT AND THE DRINKING WATER REGULATIONS.

PERSONAL AUTHOR: THOMPSON, JOHN C.

DESCRIPTOR: \*CONTAMINANTS; \*DRINKING WATER; \*CHEMICALS; \*MONITORING; OPERATIONS (WATER); \*ORGANIC CHEMICALS; \*REGULATIONS; \*SAFE DRINKING WATER ACT; \*WATER TREATMENT; \*WATER QUALITY

DESCRIPTIVE NOTE: 21-24P.

ABSTRACT: THIS ARTICLE PROVIDES AN UPDATE ON THE SAFE DRINKING WATER ACT AND DRINKING WATER REGULATIONS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V133 N8

IRIS ACCESSION NUMBER: EW013728

PUBLICATION DATE: AUG 86

TITLE: INDUSTRY PROFESSIONALS SOUND OFF IN SURVEY.

DESCRIPTOR: \*ATTITUDES; COSTS; FACILITIES; FUNDING; \*PERSONNEL; RATES; \*SURVEYS; TRENDS; \*WATER TREATMENT; \*WASTEWATER TREATMENT; WATER QUALITY

DESCRIPTIVE NOTE: 29-31P.

ABSTRACT: A SURVEY OF MUNICIPAL WATER/WASTEWATER TREATMENT PROFESSIONALS INDICATE HOW THEY FEEL ABOUT THE STATUS OF OPERATIONS AND ATTITUDES REGARDING FUNDING.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V133 N8

IRIS ACCESSION NUMBER: EW013729

PUBLICATION DATE: AUG 86

TITLE: LEADERS IN FIELD VOICE CONCERNs ABOUT LEGISLATIVE ACTIONS.

DESCRIPTOR: \*ATTITUDES; \*CLEAN WATER ACT; \*LEGISLATION; \*OPINIONS; \*REGULATIONS; \*SAFE DRINKING WATER ACT; \*WATER TREATMENT; \*WASTEWATER TREATMENT; \*WATER QUALITY

DESCRIPTIVE NOTE: 33-35P.

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ABSTRACT: INDUSTRY LEADERS PROVIDE OPINIONS ABOUT THE SAFE DRINKING WATER ACT AMENDMENTS AND PROPOSALS TO REVAMP THE CLEAN WATER ACT.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V133 N8

IRIS ACCESSION NUMBER: EW013730

PUBLICATION DATE: AUG 86

TITLE: FUNDING: THE STATUS AND THE OPTIONS.

DESCRIPTOR: \*CONSTRUCTION; \*COSTS; \*FUNDING; \*FACILITIES; BONDS; GRANTS; LOANS; PRIVATIZATION; \*TRENDS; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 39-41P.

ABSTRACT: DISCUSSED IS THE CURRENT STATUS OF FUNDING FOR CONSTRUCTING AND UPGRADING WASTEWATER TREATMENT FACILITIES AND POSSIBLE OPTIONS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V133 N8

IRIS ACCESSION NUMBER: EW013731

PUBLICATION DATE: SEP 86

TITLE: PROTECTION AND MANAGEMENT OF SPOKANE'S SOLE SOURCE AQUIFER.

PERSONAL AUTHOR: DOBRATZ, WILLIAM R.; AND OTHERS

DESCRIPTOR: \*AQUIFERS; DRINKING WATER; \*GROUNDWATER; \*MANAGEMENT; OPERATIONS (WATER); \*PLANNING; \*WASHINGTON; \*WATER RESOURCES; \*WATER SUPPLY; WATER TREATMENT

DESCRIPTIVE NOTE: 62-69P.

ABSTRACT: ALTHOUGH THE QUALITY OF SPOKANE'S SOLE SOURCE AQUIFER WAS FOUND TO CONFORM WITH DRINKING WATER STANDARDS, REGIONAL MEASURES HAVE BEEN TAKEN TO PREVENT DEGRADATION.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V79 N9

IRIS ACCESSION NUMBER: EW013732

PUBLICATION DATE: SEP 86

TITLE: CHEMICAL MONITORING OF WISCONSINS GROUNDWATER.

PERSONAL AUTHOR: KRILL, ROBERT M.; SONZOGNI, WILLIAM C.

DESCRIPTOR: \*CHEMICALS; \*CHEMICAL CONTAMINATION; \*GROUNDWATER; \*LEGISLATION; \*MONITORING; \*PUBLIC HEALTH; \*WISCONSIN; \*WATER RESOURCES; \*WATER SUPPLY; \*WATER POLLUTION CONTROL

93

91

DESCRIPTIVE NOTE: 70-75P.  
ABSTRACT: WISCONSIN HAS ENACTED LEGISLATION THAT COULD SERVE AS A MODEL TO PROTECT GROUNDWATER SOURCES FROM CHEMICAL CONTAMINATION.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V79 N9

IRIS ACCESSION NUMBER: EW013735  
PUBLICATION DATE: DEC 85

TITLE: BIOMETHANATION.

PERSONAL AUTHOR: BROWN, NORMAN L.; TATA, PRAKASAM B. S.

DESCRIPTOR: \*BIOGAS; \*ECONOMICS; \*ENERGY; \*METHANE; \*METHANE PRODUCTION; \*PLANNING; \*RESEARCH; \*TECHNOLOGY

DESCRIPTIVE NOTE: 1-108P.

ABSTRACT: THIS ISSUE IS CONCERNED WITH BIOMETHANATION. SECTIONS INCLUDE (1) INTRODUCTION, (2) RAW MATERIALS (SUPSTRATES), (3) TECHNOLOGY OF PRODUCTION, (4) ISSUES, (5) PLANNING, AND (6) RESEARCH.

AVAILABILITY: ENVIRONMENTAL SANITATION REVIEWS; NO. 17/18

IRIS ACCESSION NUMBER: EW013733

PUBLICATION DATE: SEP 86

TITLE: REMOVING CONTAMINANTS BY GROUNDWATER RECHARGE BASINS.

PERSONAL AUTHOR: SALO, JOHN E.; AND OTHERS

DESCRIPTOR: \*CONTAMINANTS; \*CALIFORNIA; \*CONTAMINANT REMOVAL; \*GROUNDWATER RECHARGE BASINS; \*SURFACE RUNOFF; \*URBAN AREAS; \*WATER RESOURCES; \*WATER SUPPLY

DESCRIPTIVE NOTE: 76-81P.

ABSTRACT: RECHARGING GROUNDWATER WITH URBAN RUNOFF HAS HAD NO APPARENT ADVERSE EFFECTS ON THE QUALITY OF THE FRESNO, CALIFORNIA, WATER SUPPLY. GROUNDWATER RECHARGE BASINS ARE EFFECTIVE IN REMOVING CONTAMINANTS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V79 N9

IRIS ACCESSION NUMBER: EW013742

PUBLICATION DATE: SEP 86

TITLE: IN SEARCH OF A MOTIVATED EMPLOYEE.

PERSONAL AUTHOR: NELSEN, DAVE; BIERIG, HARRY

DESCRIPTOR: \*MORALE; \*MICHIGAN; \*MOTIVATION; \*OPERATIONS (WASTEWATER); \*MANAGEMENT; \*PERSONNEL; \*STAFF DEVELOPMENT; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 14-17P.

ABSTRACT: DESCRIBED IS A PROGRAM AT THE DETROIT WASTEWATER TREATMENT PLANT FOR DEVELOPING AND MAINTAINING MOTIVATED EMPLOYEES.

AVAILABILITY: OPERATIONS FORUM; V3 N9

IRIS ACCESSION NUMBER: EW013734

PUBLICATION DATE: SEP 86

TITLE: OCCURRENCE AND PUBLIC HEALTH SIGNIFICANCE OF INVERTEBRATES IN DRINKING WATER SYSTEMS.

PERSONAL AUTHOR: LEVY, RICHARD V.; AND OTHERS

DESCRIPTOR: \*DRINKING WATER; \*CONTAMINATION; \*INVERTEBRATES; \*OPERATIONS (WATER); \*WATER DISTRIBUTION; \*WATER TREATMENT

DESCRIPTIVE NOTE: 105-110P.

ABSTRACT: INVERTEBRATES THAT EXIST IN DISTRIBUTION SYSTEMS MAY HARBOR CHLORINE-RESISTANT BACTERIA THAT MIGHT BE PATHOGENIC TO HUMANS. DISCUSSED ARE APPROACHES TO INVERTEBRATE CONTROL. NEW APPROACHES TO INVERTEBRATE CONTROL ARE ALSO NEEDED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V79 N9

IRIS ACCESSION NUMBER: EW013743

PUBLICATION DATE: SEP 86

TITLE: SO YOU WANT TO MAKE A VIDEO.

PERSONAL AUTHOR: WILLIAMS, DAMON S., P.E.

DESCRIPTOR: \*AUDIOVISUAL AIDS; EQUIPMENT; \*INSTRUCTIONAL MATERIALS; \*MATERIAL DEVELOPMENT; OPERATIONS (WATER); OPERATIONS (WASTEWATER); TELEVISION; \*VIDEOTAPES; WATER TREATMENT; WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 18-21P.

ABSTRACT: DESCRIBED ARE EQUIPMENT, MATERIALS, AND PROCEDURES USED FOR PRODUCING VIDEO TRAINING TAPES FOR WATER AND WASTEWATER FACILITIES.

AVAILABILITY: OPERATIONS FORUM; V3 N9

IRIS ACCESSION NUMBER: EW013744  
PUBLICATION DATE: SEP 86

TITLE: TRAINING FOR HAZARDOUS WASTES MANAGEMENT.

PERSONAL AUTHOR: MARINE, FRANK; POTTEL, DONALD S.

DESCRIPTOR: \*COURSE DESCRIPTIONS; \*HAZARDOUS WASTES; INSTRUCTION; MASSACHUSETTS; \*MANAGEMENT; OPERATIONS (WASTE); \*POSTSECONDARY EDUCATION; \*WASTE HANDLING; \*WASTE TREATMENT

DESCRIPTIVE NOTE: 22-23P.

ABSTRACT: DESCRIBED IS A COURSE IN HAZARDOUS WASTE MANAGEMENT OFFERED AT THE UNIVERSITY OF LOVELL (MASSACHUSETTS).

AVAILABILITY: OPERATIONS FORUM; V3 N9

IRIS ACCESSION NUMBER: EW013745

PUBLICATION DATE: SEP 86

TITLE: COMPUTERIZING OPERATIONS MANUALS.

PERSONAL AUTHOR: CORTINOVIS, DAN

DESCRIPTOR: \*COMPUTER APPLICATIONS; \*COMPUTER SOFTWARE; \*INSTRUCTIONAL MATERIALS; \*PUBLISHING

DESCRIPTIVE NOTE: 24-25P.

ABSTRACT: PROVIDED ARE EXAMPLES OF MATERIALS THAT CAN BE PRODUCED FOR PUBLICATIONS BY MICROCOMPUTERS AND AVAILABLE SOFTWARE.

AVAILABILITY: OPERATIONS FORUM; V3 N9

IRIS ACCESSION NUMBER: EW013746

PUBLICATION DATE: SEP 86

TITLE: FOAM AND SCUM: CAUSES AND CURES.

PERSONAL AUTHOR: ZICKE FOOSE, CHUCK S.; VASS, ROBERT

DESCRIPTOR: \*FOAM; \*OPERATIONS (WASTEWATER); \*SCUM; \*TROUBLE SHOOTING; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 26-29P.

ABSTRACT: PRESENTED ARE SUGGESTIONS FOR SOLVING FOAM AND SCUM PROBLEMS IN WASTEWATER TREATMENT PLANTS.

AVAILABILITY: OPERATIONS FORUM; V3 N9

IRIS ACCESSION NUMBER: EW013747  
PUBLICATION DATE: SEP 86

TITLE: COUNTY'S SEARCH FOR LONG-TERM WATER SUPPLY PAYS OFF.

PERSONAL AUTHOR: HALL, DAVID R. P. E.

DESCRIPTOR: \*DRINKING WATER; \*FACILITIES; \*MARYLAND; \*OPERATIONS (WATER); \*WATER SUPPLY; \*WATER TREATMENT

DESCRIPTIVE NOTE: 104-105P.

ABSTRACT: A WATER TREATMENT PLANTS' CAPACITY WAS DOUBLED WITHOUT DISRUPTING CUSTOMER SERVICE OR EXCEEDING A LIMITED BUDGET. OPERATIONS ARE DESCRIBED.

AVAILABILITY: PUBLIC WORKS; V117 N9

IRIS ACCESSION NUMBER: EW013748

PUBLICATION DATE: SEP 86

TITLE: GETTING YOUR MONEY'S WORTH FROM COMPUTER BASED CONTROL SYSTEMS - PART 1.

PERSONAL AUTHOR: SHIRREFF, WILLIAM J. P. E.

DESCRIPTOR: \*CONTROL SYSTEMS; \*COMPUTER APPLICATIONS; \*MANAGEMENT; \*OPERATIONS (WASTEWATER); \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 106-108P.

ABSTRACT: THIS ARTICLE REVIEWS DESIRABLE FEATURES OF A WASTEWATER FACILITY COMPUTER BASED CONTROL SYSTEM.

AVAILABILITY: PUBLIC WORKS; V117 N9

IRIS ACCESSION NUMBER: EW013749

PUBLICATION DATE: SEP 86

TITLE: TV INSPECTION OF WELL AVOIDS NEEDLESS EXPENSE.

DESCRIPTOR: \*INSPECTION; \*MAINTENANCE; \*TELEVISION; \*WATER WELLS; \*WELLS; \*WATER SUPPLY

DESCRIPTIVE NOTE: 110-111P.

ABSTRACT: TV INSPECTION OF WELLS CAN AVOID NEEDLESS EXPENSE. AN EXAMPLE IS PROVIDED WHERE DISCOVERY OF DAMAGED SCREENS LED TO ABANDONMENT OF A REPAIR PROJECT.

AVAILABILITY: PUBLIC WORKS; V117 N9

IRIS ACCESSION NUMBER: EW013750  
PUBLICATION DATE: SEP 86

TITLE: PUMP STATION'S COST REDUCED DRAMATICALLY.

PERSONAL AUTHOR: MOY, RICHARD L., P. E.; RANDO, ANTHONY J.

DESCRIPTOR: \*CALIFORNIA; \*COSTS; \*FACILITIES; \*PUMP STATIONS; \*OPERATIONS (WASTEWATER); \*PUMPS; \*SUBMERSIBLE PUMPS; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 121-123P.

ABSTRACT: USE OF SUBMERSIBLE PUMPS HELPED TO CURTAIL STRUCTURAL COSTS OF A CALIFORNIA WASTEWATER PUMPING SYSTEM.

AVAILABILITY: PUBLIC WORKS; V117 N9

IRIS ACCESSION NUMBER: EW013751

PUBLICATION DATE: SEP 86

TITLE: THE SAFE DRINKING WATER ACT. A SUMMARY OF AMMENDMENTS TO THE SAFE DRINKING WATER ACT AND REVISIONS OF THE DRINKING WATER REGULATIO

PERSONAL AUTHOR: THOMPSON, JOHN O.

DESCRIPTOR: \*AMENDMENTS; \*CHEMICALS; \*DRINKING WATER; \*INORGANIC CHEMICALS; \*METALS; \*ORGANIC COMPOUNDS; \*REGULATIONS; \*SAFE DRINKING WATER ACT

DESCRIPTIVE NOTE: 123-125, 184-188P.

ABSTRACT: PRESENTED IS A SUMMARY OF THE REVISED REGULATIONS UNDER RECENT AMENDMENTS OF THE SAFE DRINKING WATER ACT.

AVAILABILITY: PUBLIC WORKS; V117 N9

IRIS ACCESSION NUMBER: EW013752

PUBLICATION DATE: SEP 86

TITLE: FLOW EQUALIZING SAVES TIME AND MONEY.

PERSONAL AUTHOR: UBEL, JOHN R., P. E.

DESCRIPTOR: \*CONTROL SYSTEM; \*FACILITIES; \*FLOW EQUALIZATION SYSTEMS; \*FLOW EQUALIZATION; \*OPERATIONS (WASTEWATER); \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 128-130P.

ABSTRACT: DESCRIBED IS FLOW EQUALIZATION SYSTEM FOR A WASTEWATER TREATMENT PLANT. THE SYSTEM DAMPENS PEAK FLOWS AND SHOCK LOADS, AND IMPROVES PLANT PERFORMANCE.

AVAILABILITY: PUBLIC WORKS; V117 N9

IRIS ACCESSION NUMBER: EW013753  
PUBLICATION DATE: SEP 86

TITLE: REGIONALIZATION CONCEPT AIDS WASTEWATER SYSTEMS.

PERSONAL AUTHOR: GIACHINO, JOHN; FERGUSON, CAROL

DESCRIPTOR: \*CONTRACTORS; \*COSTS; \*MANAGEMENT; \*OPERATIONS (WASTEWATER); \*OREGON; \*REGIONALIZATION; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 82-88P.

ABSTRACT: DESCRIBED IS A PROGRAM DEVELOPED THAT LINKS FIVE OREGON COMMUNITIES INTO A CONTRACTOR-RUN REGIONALIZATION OPERATION FOR WASTEWATER TREATMENT. THE PROGRAM HAS LOWERED RATES FOR USERS AND PROVIDED SERVICES THAT WERE NOT PREVIOUSLY AVAILABLE.

AVAILABILITY: AMERICAN CITY AND COUNTY; V101 N9

IRIS ACCESSION NUMBER: EW013754

PUBLICATION DATE: SEP 86

TITLE: A TALE OF THREE GIANT SEWERAGE SYSTEMS.

PERSONAL AUTHOR: BARLETTA, ROBERT J.; WEBBER, ROBERT A.

DESCRIPTOR: \*CALIFORNIA; \*FACILITIES; \*EQUIPMENT; \*MONITORING; \*OPERATIONS (WASTEWATER); \*TECHNOLOGY; \*WASTEWATER TREATMENT; \*WATER POLLUTION CONTROL; \*WATER QUALITY; \*WATER REUSE

DESCRIPTIVE NOTE: 871-879P.

ABSTRACT: DESCRIBED ARE THREE LARGE SEWERAGE SYSTEMS IN THE LOS ANGELES (CALIFORNIA) AREA.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V58 N9

IRIS ACCESSION NUMBER: EW013755

PUBLICATION DATE: SEP 86

TITLE: WPCF ISSUE PAPER: IS CLEAN WATER RESEARCH KEEPING PACE WITH NATIONAL POLLUTION CONTROL NEEDS.

DESCRIPTOR: FUNDING; PUBLIC HEALTH; LEGISLATION; REGULATIONS; \*RESEARCH NEEDS; POLICIES; RECOMMENDATIONS; \*RESEARCH; \*TRENDS; \*WASTEWATER TREATMENT; \*WATER TREATMENT; WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 880-885P.

ABSTRACT: THIS IS AN ISSUE PAPER DEVELOPED BY AN AD HOC COMMITTEE ON RESEARCH AND DEVELOPMENT. SEVERAL ISSUES RELATED TO WATER RESEARCH ARE DISCUSSED. INCLUDED ARE LAWS,

PRIORITY RESEARCH AREAS, RESEARCH FUNDING, AND DIRECTIONS.  
AVAILABILITY: JOURNAL, WATER POLLUTION CONTROL FEDERATION;  
V58 N9

IRIS ACCESSION NUMBER: EW013756

PUBLICATION DATE: SEP 86

TITLE: NITRIFICATION IN TRICKLING FILTERS.

PERSONAL AUTHOR: PARKER, DENNY S.; RICHARD, TYLER

DESCRIPTOR: BOD; DESIGN; EQUIPMENT; FILTERS; FACILITIES;  
\*OPERATIONS (WASTEWATER); \*NITRIFICATION; \*PILOT STUDIES;  
\*TRICKLING FILTERS; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 896-902P.

ABSTRACT: REPORTED ARE THE RESULTS OF TWO PILOT STUDIES.  
BASING ORGANIC LOADING ON SURFACE AREA RATHER THAN VOLUME IS  
A MORE RATIONAL DESIGN METHOD, BUT DOES NOT ACCOUNT FOR  
DIFFERENCES IN TYPES OF MEDIA.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION;  
V58 N9

IRIS ACCESSION NUMBER: EW013757

PUBLICATION DATE: SEP 86

TITLE: A RATIONAL METHOD FOR SLUDGE DEWATERING VIA  
FREEZING.

PERSONAL AUTHOR: REED, S.; AND OTHERS

DESCRIPTOR: \*ALTERNATIVE TECHNOLOGY; DESIGN; \*DEWATERING;  
\*FREEZING; \*OPERATIONS (WASTEWATER); SLUDGE; \*SLUDGE  
DEWATERING; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 911-916P.

ABSTRACT: DESCRIBED IS A PROCEDURE FOR SLUDGE DEWATERING  
USING A FREEZING TECHNIQUE. IT CAN BE USED IN NORTHERN  
CLIMATES AND SHOULD BE USEFUL WITH EXISTING SAND BEDS.

AVAILABILITY: JOURNAL, WATER POLLUTION CONTROL FEDERATION;  
V58 N9

IRIS ACCESSION NUMBER: EW013758

PUBLICATION DATE: SEP 86

TITLE: COMMUNICATION.

DESCRIPTOR: ACTIVE MASS; ACTIVATED SLUDGE; DESIGN;  
\*EQUATIONS; \*MATERIAL BALANCE; \*OPERATIONS (WASTEWATER);  
\*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 932-936P.

ABSTRACT: THIS PAPER FOCUSES ON THE MATERIAL BALANCE  
RELATIONSHIPS THAT ACTUALLY OPERATE IN ACTIVATED SLUDGE  
OPERATIONS, AND HOW THEY GENERATE A SIMPLE FORMULATION TO  
PREDICT ACTIVE MASS.

AVAILABILITY: JOURNAL, WATER POLLUTION CONTROL FEDERATION;  
V58 N9

IRIS ACCESSION NUMBER: EW013764

PUBLICATION DATE: SEP 86

TITLE: LIGHT AND LIGHTING: LIGHT MOVES.

PERSONAL AUTHOR: SHAMON, HARVEY

DESCRIPTOR: \*LIGHTING; \*PHOTOGRAPHY; \*TECHNICAL PHOTOGRAPHY

DESCRIPTIVE NOTE: 18P.

ABSTRACT: THIS ARTICLE DESCRIBES THE EFFECTS OF MOVING  
LIGHT WHILE MAINTAINING THE POSITIONS OF THE CAMERA AND THE  
SUBJECT.

AVAILABILITY: TECHNICAL PHOTOGRAPHY FOR INDUSTRIAL,  
MILITARY AND GOVERNMENT STILL, CINE AND AV PROFESSIONALS;  
V18 N9

IRIS ACCESSION NUMBER: EW013772

PUBLICATION DATE: FEB 86

TITLE: IMPROVING DESIGN AND OPERATION OF MULTIPLE-HEARTH  
AND FLUID BED SLUDGE INCINERATORS.

PERSONAL AUTHOR: METCALF AND EDDY, INC.

DESCRIPTOR: \*DESIGN; \*INCINERATORS; \*OPERATIONS  
(WASTEWATER); \*MAINTENANCE; \*PERFORMANCE EVALUATION; SLUDGE;  
\*SLUDGE INCINERATORS; \*WASTE DISPOSAL; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 151P. PRICE: \$10.00

ABSTRACT: THE PURPOSE OF THIS INVESTIGATION IS TO DOCUMENT  
IMPROVEMENTS IN DESIGN, OPERATION, AND MAINTENANCE OF  
MULTIPLE-HEARTH AND FLUID BED FURNACE INCINERATION FOR  
COMBUSTION OF SLUDGE IN MUNICIPAL WASTEWATER TREATMENT  
PLANTS. THE INFORMATION CONTAINED IN THIS REPORT IS INTENDED  
TO SUPPLEMENT AND QUALIFY INFORMATION AVAILABLE FROM  
INCINERATOR MANUFACTURERS AND PUBLISHED LITERATURE. THE  
REPORT ADDRESSES INCINERATOR AND SUPPORT SYSTEMS DESIGN  
DEFICIENCIES AND SOLUTIONS, OPERATION AND MAINTENANCE  
PROBLEMS AND SOLUTIONS, FUEL EFFICIENT OPERATION, UPGRADING  
OF EXISTING INCINERATORS, ADMINISTRATION AND PERSONNEL  
TRAINING. ADVANTAGES AND DISADVANTAGES OF THE TWO TYPES OF  
INCINERATORS IN REGARDS TO PLANT SIZE, DESIGN, OPERATION,  
EMISSIONS, FUEL REQUIREMENTS, MAINTENANCE, ELECTRIC POWER,  
AND LABOR ARE ALSO DISCUSSED. BEST PRACTICES IN THE AREAS OF

OPERATION AND MAINTENANCE, ADMINISTRATION, UPGRADING, FUEL EFFICIENCY, EMISSIONS, AND DESIGN OF FUTURE FACILITIES ARE ALSO PRESENTED. THE INFORMATION FOR THIS PROJECT WAS COLLECTED FROM AVAILABLE LITERATURE, REVIEW OF PREVIOUS SURVEYS OF WASTEWATER TREATMENT PLANTS, INFORMATION FROM INCINERATOR MANUFACTURERS, INHOUSE EXPERIENCE, SITE VISITS TO WASTEWATER TREATMENT PLANTS NATIONWIDE, AND CONTACTS WITH MANUFACTURERS. THE DATA BASE IS INCLUDED IN THE APPENDIX.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW013773

PUBLICATION DATE: FEB 86

TITLE: FORECASTING ONSITE SOIL ABSORPTION SYSTEM FAILURE RATES.

PERSONAL AUTHOR: HUDSON, JAMES

DESCRIPTOR: FACILITIES; \*FAILURE RATES; \*FORECASTING TECHNIQUES; \*MODELS; \*ONSITE WASTEWATER TREATMENT; ONSITE DISPOSAL; \*PERFORMANCE EVALUATION; SOILS; \*SOIL ABSORPTION; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 64P. PRICE: \$4.84

ABSTRACT: A REVIEW WAS MADE OF FOUR PREVIOUS STUDIES OF ONSITE SOIL ABSORPTION SYSTEM FAILURE IN FOUR DIFFERENT AREAS OF THE UNITED STATES. FROM THIS BASE A SERIES OF FORECASTING TECHNIQUES WERE DEVELOPED WITH VARYING LEVELS OF ACCURACY FOR USE BY FACILITY PLANNERS IN EVALUATING COMPARATIVE COSTS OF ALTERNATIVE PLANS FOR POLLUTION ABATEMENT IN SMALL COMMUNITIES. THE REQUIRED INPUT DATA AND EXPECTED LEVEL OF ACCURACY TO BE EXPECTED FOR EACH FORECASTING METHOD IS ALSO PROVIDED ALONG WITH THE ASSUMPTIONS MADE IN DEVELOPMENT AND TESTING OF THE MODELS AGAINST AVAILABLE DATA.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW013774

PUBLICATION DATE: FEB 86

TITLE: FIELD INVESTIGATION OF BIOLOGICAL TOILET SYSTEMS AND GREY WATER TREATMENT.

PERSONAL AUTHOR: ENFERADI, KAROL M.; AND OTHERS

DESCRIPTOR: \*GREY WATER SYSTEMS; \*OPERATIONS (WASTEWATER); \*ONSITE WASTEWATER TREATMENT; \*ONSITE DISPOSAL; \*PERFORMANCE EVALUATION; \*SEPTIC TANKS; \*TOILETS; \*RISK ASSESSMENT; \*WASTE DISPOSAL; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 290P. PRICE: \$18.40

ABSTRACT: THE OBJECTIVE OF THE FIELD PROGRAM WAS TO

DETERMINE THE OPERATIONAL CHARACTERISTICS AND OVERALL ACCEPTABILITY OF POPULAR MODELS OF BIOLOGICAL TOILETS AND A FEW SELECT GREY WATER SYSTEMS. A FIELD OBSERVATION SCHEME WAS DEVISED TO TAKE ADVANTAGE OF IN-USE SITES THROUGHOUT THE STATE OF CALIFORNIA. A HEALTH RISK ASSESSMENT WAS PERFORMED CONCURRENTLY USING ENVIRONMENTAL HEALTH EXPERTS TO ESTIMATE THE PROBABILITY THAT A SIGNIFICANT FAILURE OF A PARTICULAR ON-SITE WASTE TREATMENT AND DISPOSAL SYSTEM WOULD OCCUR. THE TECHNIQUE USED BY THE ENVIRONMENTAL HEALTH EXPERTS IS AN OBJECTIVE DECISION-MAKING TECHNIQUE THAT MAY BE USED BY REGULATORY OFFICIALS TO EVALUATE NEW TECHNOLOGIES WHERE THERE IS AN ABSENCE OF DEFINITIVE TEST INFORMATION. THIS ASSESSMENT RESULTS IN A PROBABILITY THAT IS EXPRESSED IN RELATION TO THE ESTIMATED RISK OF A KNOWN SYSTEM, THE SEPTIC TANK-SOIL ABSORPTION SYSTEM. MODEL EDUCATION AND SURVEILLANCE-MONITORING FRAMEWORKS ARE PRESENTED. SINCE THE USER MAY NEED GUIDANCE DURING SITING AND OPERATION AND IN THE EVENT OF SYSTEM FAILURES, THIRD-PARTY MANAGEMENT IS STRONGLY ADVISED.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW013775

PUBLICATION DATE: FEB 84

TITLE: OREGON ONSITE EXPERIMENTAL SYSTEMS PROGRAM.

PERSONAL AUTHOR: RONAYNE, MARK P.; AND OTHERS

DESCRIPTOR: \*APPROPRIATE TECHNOLOGY; BIOLOGICAL TOILETS; GREYWATER SYSTEMS; SAND FILTERS; \*OPERATIONS (WASTEWATER); \*ONSITE WASTEWATER TREATMENT; \*ONSITE DISPOSAL; \*PERFORMANCE EVALUATION; \*TECHNOLOGY; \*WASTE DISPOSAL; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 269P. PRICE: \$17.14

ABSTRACT: THIS STUDY WAS INITIATED TO DEVELOP USEFUL DESIGN AND PERFORMANCE DATA ON ALTERNATIVE ONSITE WASTEWATER TREATMENT AND DISPOSAL SYSTEMS WHICH WOULD PERMIT THE USE OF NON-SEWERED TECHNOLOGICAL SOLUTIONS TO RESIDENTS OF RURAL AND SUBURBAN AREAS OF THE STATE OF OREGON AND THE REST OF THE UNITED STATES. IN ORDER TO EXCLUDE THE POSSIBILITY OF SYSTEM FAILURE DUE TO HOMEOWNER NEGLECT OR ABUSE, ALL SYSTEMS WERE INSTALLED AT HOMEOWNER'S EXPENSE. THE SYSTEMS WERE CHOSEN FOR THE MOST PART TO SUIT THE SPECIFIC CLIMATE, SOIL CONDITIONS AND TOPOGRAPHY OF THE LOCATION FROM A VARIETY OF PREVIOUSLY DEVELOPED AND LOCALLY CONCEIVED SYSTEMS WITH VARYING DEGREES OF MODIFICATION TO SUIT THE APPLICATION. AMONG THE TECHNOLOGIES EVALUATED WERE THREE TYPES OF SAND FILTERS, TWO TYPES OF EVAPOTRANSPIRATION SYSTEMS, MOUNDS, BIOLOGICAL ("COMPOSTING") TOILETS, GRAYWATER SYSTEMS, STEEP-SLOPE SYSTEMS, PRESSURE DISTRIBUTION, TILE-DEWATERING SYSTEMS, AND VARIOUS COMBINATIONS OF THE ABOVE.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW013776

PUBLICATION DATE: JAN 86

TITLE: UPGRADING DIAGNOSTIC OPERATIONAL MODELING PROGRAMS FOR MUNICIPAL WASTEWATER TREATMENT PLANTS AND TROUBLESHOOTING PROGRAM FOR ACTIVA

DESCRIPTOR: \*COMPUTER APPLICATIONS; \*DIAGNOSTIC EVALUATION; \*DESIGN; \*FACILITIES; \*EQUIPMENT; \*MODELS; \*OPERATIONS (WASTEWATER); \*PERFORMANCE EVALUATION; \*TROUBLESHOOTING; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 124P. PRICE: \$5.75

ABSTRACT: THIS USER'S MANUAL DESCRIBES THE OPERATION AND USE OF THE NEWLY RELEASED AND UPDATED DIAGNOSTIC PROGRAMS. THE PROGRAMS CAN BE USED TO EVALUATE TREATMENT PLANT DESIGN LIMITATIONS AND OPERATIONAL DEFICIENCIES. SECTIONS IN THE MANUAL INCLUDE: (1) INTRODUCTION, (2) USING THE COMPUTER, (3) RUNNING THE PROGRAMS, (4) APPLICATION AND THEORY, (5) DIGESTER AND ACTIVATED SLUDGE ANALYTICAL AND TROUBLESHOOTING PROGRAM, AND (6) APPENDICES. PROGRAMS FOR 11 TYPES OF MUNICIPAL WASTEWATER TREATMENT PLANTS ARE AVAILABLE. EACH PROGRAM ALLOWS FOR THE OPTION OF SELECTING EITHER ANEROBIC OR AEROBIC SLUDGE DIGESTION ANALYSIS. THE PROGRAMS HAVE BEEN PREPARED FOR USE WITH THE APPLE II PLUS OR APPLE IIE MICROCOMPUTERS. SEVEN DISKETTES ARE AVAILABLE FOR RUNNING THE 11 DIAGNOSTIC PROGRAMS. SOME OF THE DISKETTES ARE USED FOR MODELING ONLY ONE TYPE OF WASTEWATER TREATMENT PLANT, WHILE OTHERS ARE USED TO PERFORM DIAGNOSTIC RUNS ON VARIOUS TYPES OF WASTEWATER TREATMENT PLANTS. (SEE EW 013 777 FOR A DESCRIPTION OF THE DISKETTES).

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

SELECTING EITHER ANEROBIC OR AEROBIC SLUDGE DIGESTION ANALYSIS. THE PROGRAMS HAVE BEEN PREPARED FOR USE WITH THE APPLE II PLUS OR APPLE IIE MICROCOMPUTERS. SOME OF THE DISKETTES ARE USED FOR MODELING ONLY ONE TYPE OF WASTEWATER TREATMENT PLANT, WHILE OTHERS ARE USED TO PERFORM DIAGNOSTIC RUNS ON VARIOUS TYPES OF WASTEWATER TREATMENT PLANTS. THE DISKETTES ARE AVAILABLE AS A SET; THEY ARE NOT AVAILABLE SEPARATELY.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW013777

PUBLICATION DATE: JAN 86

TITLE: UPGRADED DIAGNOSTIC OPERATIONAL MODELING PROGRAMS FOR MUNICIPAL WASTEWATER TREATMENT PLANTS AND TROUBLESHOOTING PROGRAM FOR ACTIVAT

DESCRIPTOR: \*COMPUTER SOFTWARE; \*COMPUTER APPLICATIONS; \*COMPUTER DISKETTES; \*DIAGNOSTIC EVALUATION; \*DESIGN; \*FACILITIES; \*EQUIPMENT; \*MODELS; \*OPERATIONS (WASTEWATER); \*PERFORMANCE EVALUATION; \*TROUBLESHOOTING; \*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 8 DISCS. FOR USER'S MANUAL SEE EW 013 776. PRICE: \$40.00.

ABSTRACT: THESE ARE THE DISKETTES TO USE WITH THE USERS MANUAL (13776). INCLUDED ARE SEVEN DISKETTES (1) ROUGHING FILTER, (2) ACTIVATED SLUDGE WITHOUT PRIMARY CLARIFIERS, (3) CONTACT STABILIZATION, (4) TRICKLING FILTER, (5) RBC AND PRIMARY TREATMENT, (6) ACTIVATED SLUDGE WITH PRIMARY CLARIFIERS, AND (7) ACTIVATED BIOLOGICAL FILTER (AB7). PROGRAMS ARE INCLUDED FOR 11 TYPES OF MUNICIPAL WASTEWATER TREATMENT PLANTS. EACH PROGRAM ALLOWS FOR THE OPTION OF

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*ASSAYS	(1)	EW013698
ASSESSMENT	(1)	EW013652
*ATTITUDES	(4)	EW013571 EW013707 EW013728 EW013729
*ATTORNEYS	(1)	EW013594
*AUDIOVISUAL AIDS	(8)	EW013602 EW013603 EW013643 EW013644 EW013645 EW013646 EW013705 EW013743
AUDIOVISUAL AIDS	(1)	EW009245
AUTHORING SOFTWARE	(1)	EW013705
*AUTOMATED ANALYSIS	(1)	EW013658
*AUTOMATIC CONTROLS	(1)	EW013582
*AUTOMATION	(1)	EW013582
*BACTERIA	(1)	EW013627
*BACTERIOPLANKTON	(1)	EW013608
*BIBLIOGRAPHIES	(3)	EW013691 EW013715 EW013716
BIDDING	(1)	EW013564
*BIOGAS	(1)	EW013735
*BIOLOGICAL CONTACTORS	(2)	EW013626 EW013662
*BIOLOGICAL CONTROL	(1)	EW012175
*BIOLOGICAL FIXED-FILM SYSTEMS	(1)	EW013662
*BIOLOGICAL INDICATORS	(2)	EW013608 EW013612
BIOLOGICAL TOILETS	(1)	EW013775
*BIOLOGICAL TREATMENT	(3)	EW013677 EW013684 EW013724
BIOLOGICAL TREATMENT	(1)	EW013679
*BIOLOGY	(6)	EW012371 EW013606 EW013610 EW013611 EW013689 EW013694
*BIOTECHNOLOGY	(1)	EW012371
*BIVALVES	(1)	EW013612
BOD	(1)	EW013756
BONDS	(1)	EW013730
*BUDGET	(1)	EW013594
BUDGETS	(1)	EW013630
*CALIFORNIA	(6)	EW013564 EW013642 EW013719 EW013733 EW013750 EW013754

*CANADA	(2)	EW013553	EW013628					
*CARBON ADSORPTION	(1)	EW013566						
*CASE HISTORIES	(1)	EW013620						
*CASE STUDIES	(1)	EW013676						
*CATALOGS	(2)	EW013602	EW013603					
*CERCLA	(1)	EW013597						
*CERTIFICATION	(1)	EW013584						
*CERTIFICATION REVOCATION	(1)	EW013584						
*CHANGE PROCESS	(1)	EW013706						
*CHEMICAL ABSTRACTS	(2)	EW013715	EW013716					
*CHEMICAL ANALYSIS	(1)	EW013655						
CHEMICAL ANALYSIS	(1)	EW013656						
*CHEMICAL CONTAMINATION	(1)	EW013732						
*CHEMICAL DISPERSIBILITY	(1)	EW013555						
*CHEMICAL EMERGENCIES	(1)	EW013553						
*CHEMICAL GROUTING	(1)	EW013634						
*CHEMICAL INDUSTRY	(1)	EW013684						
*CHEMICAL REACTIONS	(1)	EW013693						
CHEMICAL REACTIONS	(1)	EW013629						
*CHEMICAL RESISTANCE	(1)	EW013385						
*CHEMICALS	(11)	EW013385	EW013580	EW013629	EW013655	EW013684	EW013694	EW013698
	EW013702	EW013727	EW013732	EW013751				
CHEMICALS	(1)	EW013553						
*CHEMICAL TREATMENT	(2)	EW013660	EW013677					
*CHEMISTRY	(5)	EW013576	EW013689	EW013714	EW013715	EW013716		
*CHESAPEAKE BAY	(1)	EW013723						
*CHLORINATED HYDROCARBONS	(1)	EW013612						
*CHLORINE	(1)	EW013577						
*CHLORINE DIOXIDE	(4)	EW013563	EW013576	EW013577	EW013578			
CLARIFIERS	(1)	EW013713						
*CLEANING	(1)	EW013570						
*CLEANUP	(2)	EW013628	EW013629					
*CLEAN WATER ACT	(2)	EW013654	EW013729					

*CLIMATE	(2)	EW013607	EW013611					
COAGULATION	(1)	EW013660						
*COAL	(1)	EW013680						
*COAL CLEANING	(1)	EW013680						
*COAL INDUSTRY	(1)	EW013680						
*COAL MINE DRAINAGE	(1)	EW013680						
COLOR	(1)	EW013657						
*COLORADO	(1)	EW013578						
*COMBINED SEWERS	(1)	EW013670						
*COMMERCIAL WATER USE	(1)	EW013668						
*COMPARATIVE EVALUATION	(1)	EW013577						
*COMPLIANCE	(3)	EW013595	EW013596	EW013651				
*COMPOSTING	(1)	EW013671						
COMPOSTING	(1)	EW013561						
*COMPUTER APPLICATION	(1)	EW013667						
*COMPUTER APPLICATIONS	(15)	EW013562	EW013582	EW013633	EW013640	EW013641	EW013647	EW013648
COMPUTER APPLICATIONS	EW013649	EW013650	EW013703	EW013705	EW013745	EW013748	EW013776	EW013777
(1)	EW013567							
*COMPUTER DISKETTES	(1)	EW013777						
*COMPUTER HARDWARE	(1)	EW013647						
*COMPUTER INSTRUCTION	(1)	EW013631						
*COMPUTERS	(3)	EW013631	EW013633	EW013647				
*COMPUTER SOFTWARE	(7)	EW013562	EW013632	EW013648	EW013649	EW013703	EW013745	EW013777
*COMPUTER SOFTWARE REVIEWS	(1)	EW013703						
*COMPUTER TERMINALS	(1)	EW013633						
*CONSERVATION	(2)	EW013573	EW013585					
*CONSTRUCTION	(8)	EW013517	EW013575	EW013587	EW013659	EW013701	EW013717	EW013720
CONSTRUCTION	EW013730							
(2)	EW013602	EW013603						
*CONSTRUCTION CLAIMS	(1)	EW013575						
*CONSTRUCTION GRANTS	(1)	EW009245						
*CONSTRUCTION GRANTS PROGRAM	(1)	EW013587						
*CONSTRUCTION PROJECTS	(1)	EW013621						

*CONSUMERS	(2)	EW013571	EW013574
*CONTAMINANT REMOVAL	(1)	EW013733	
*CONTAMINANTS	(3)	EW013609	EW013727
*CONTAMINATION	(6)	EW013516	EW013629
*CONTINUOUS MONITORING	(1)	EW013691	EW013699
*CONTRACTORS	(2)	EW013723	EW013734
*CONTROL SYSTEM	(1)	EW013658	
*CONTROL SYSTEMS	(2)	EW013755	EW013753
*CORPORATIONS	(1)	EW013752	
*COST-BENEFIT ANALYSIS	(1)	EW013748	
*COSTS	(1)	EW013630	
COSTS	(13)	EW013653	EW013643
COSTS	EW013717	EW013572	EW013581
COSTS		EW013718	EW013719
COSTS		EW013583	EW013585
COSTS		EW013596	EW013624
COSTS		EW013750	EW013753
*COURSE DESCRIPTIONS	(2)	EW013728	
*CUSTOMER RELATIONS	(1)	EW013744	
*CYANIDE	(1)	EW013574	
*DAIRY WASTES	(1)	EW013683	
*DATA ACQUISITION	(1)	EW013676	
*DATA ANALYSIS	(1)	EW013640	
*DATA COLLECTION	(2)	EW013655	EW013708
*DATA GATHERING	(1)	EW013708	
*DATA GATHERING PROCESSES	(1)	EW013597	
*DEMONSTRATION PLANTS	(1)	EW013597	
*DESIGN	(1)	EW013566	
DESIGN	(11)	EW012962	EW013587
DESIGN	EW013719	EW013772	EW013632
DESIGN		EW013776	EW013659
DESIGN		EW013777	EW013663
DESIGN		EW013672	EW013717
*DESTRATIFICATION	(5)	EW013661	EW013670
*DETENTION PONDS	(1)	EW013756	EW013757
DETERGENTS	(1)	EW013757	EW013758
*DEVELOPING COUNTRIES	(1)	EW013690	
*DEWATERING	(1)	EW013725	
*DEWATERING	(2)	EW013656	
*DIAGNOSTIC EVALUATION	(2)	EW013776	EW013757
*DIAGNOSTIC EVALUATION	(2)	EW013777	
*DIATOMACEOUS EARTH	(1)	EW013777	
*DIATOMACEOUS EARTH	(1)	EW013566	

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*DIRECTORIES	(2)	EW013602	EW013603						
*DISEASES	(1)	EW013512							
*DISINFECTION	(5)	EW013521	EW013569	EW013576	EW013578	EW013666			
*DISPERSION	(1)	EW013555							
*DISSOLVED OXYGEN	(1)	EW013690							
*DISTRIBUTION	(1)	EW013643							
*DITHIOCARBAMATES	(1)	EW013514							
*DNOC	(1)	EW013519							
*DOMESTIC WATER USE	(1)	EW013668							
*DRASTIC	(1)	EW013516							
*DRAWINGS	(1)	EW013623							
*DRINKING WATER	(19)	EW010821	EW013512	EW013513	EW013521	EW013554	EW013563	EW013571	
	EW013572	EW013576	EW013577	EW013580	EW013581	EW013651	EW013654	EW013718	
DRINKING WATER		EW013734	EW013747	EW013751					
	(1)	EW013731							
*DROUGHT	(1)	EW013573							
*DUAL DIGESTION SYSTEMS	(1)	EW013624							
*E. COLI	(1)	EW013521							
*ECOLOGICAL FACTORS	(1)	EW013697							
*ECOLOGY	(3)	EW013606	EW013692	EW013697					
ECOLOGY	(1)	EW013694							
*ECONOMICS	(6)	EW013619	EW013650	EW013653	EW013677	EW013703	EW013735		
*ECUADOR	(1)	EW010821							
*EDITING	(1)	EW013646							
EFFLUENT	(1)	EW013713							
*EFFLUENT QUALITY	(1)	EW013713							
*EFFLUENTS	(3)	EW013679	EW013681	EW013695					
*ELECTRICITY	(1)	EW013572							
*ELECTROPLATING	(1)	EW013683							
EMERGENCIES	(1)	EW013553							
*ENERGY	(2)	EW013682	EW013735						
*ENERGY CONSERVATION	(2)	EW013572	EW013585						
*ENERGY PRODUCTION	(1)	EW013554							

*ENFORCEMENT	(3)	EW013594	EW013595	EW013596				
*ENGINEERING	(1)	EW013623						
*ENVIRONMENT	(2)	EW012175	EW013700					
ENVIRONMENT	(3)	EW013553	EW013602	EW013603				
*ENVIRONMENTAL EFFECTS	(1)	EW013698						
*ENVIRONMENTAL HEALTH	(1)	EW013394						
*ENVIRONMENTAL IMPACT	(1)	EW013600						
*ENVIRONMENTAL IMPACTS	(6)	EW013606	EW013680	EW013681	EW013692	EW013693	EW013694	
ENVIRONMENTAL IMPACTS	(1)	EW013686						
*ENVIRONMENTAL POLICY	(1)	EW013653						
*ENVIRONMENTAL PROTECTION AGENCY	(1)	EW013654						
*EQUATIONS	(1)	EW013758						
*EQUIPMENT	(8)	EW013553	EW013581	EW013583	EW013636	EW013712	EW013754	EW013776
EQUIPMENT	(2)	EW013743	EW013756					
*ESTUARIES	(2)	EW013668	EW013695					
*ETHANOL	(1)	EW013506						
*EUTROPHICATION	(1)	EW013608						
*EVALUATION	(2)	EW013516	EW013631					
*FACILITIES	(17)	EW012962	EW013587	EW013621	EW013635	EW013659	EW013662	EW013663
	EW013717	EW013718	EW013719	EW013730	EW013747	EW013750	EW013752	EW013754
FACILITIES	(2)	EW013777						
	(5)	EW009245	EW013686	EW013728	EW013756	EW013773		
*FAILURE RATES	(1)	EW013773						
*FARMS	(1)	EW013604						
*FEDERAL ROLE	(1)	EW010821						
*FEEDBACK	(1)	EW013557						
*FERMENTATION	(1)	EW013675						
*FIELD STUDIES	(2)	EW013513	EW013517					
*FIELD TECHNIQUES	(1)	EW013611						
*FILTERS	(1)	EW013635						
FILTERS	(1)	EW013756						
*FILTRATION	(2)	EW013554	EW013566					
*FISH	(2)	EW013673	EW013694					

*FLORIDA	(1)	EW013718
*FLOW EQUALIZATION	(1)	EW013752
*FLOW EQUALIZATION SYSTEMS	(1)	EW013752
FLUIDIZED-BED COMBUSTION	(1)	EW013682
*FOAM	(1)	EW013746
*FORECASTING TECHNIQUES	(1)	EW013773
*FOREIGN AID	(1)	EW010821
*FOREST PRODUCTS	(1)	EW013679
*FORESTS	(1)	EW013600
FOSSIL FUELS	(1)	EW013682
*FOURIER TRANSFORM SPECTROMETRY	(1)	EW013714
*FREEZING	(1)	EW013757
*FRUITS	(1)	EW013674
*FUNDING	(3)	EW013587 EW013600 EW013730
FUNDING	(2)	EW013728 EW013755
*GAO	(2)	EW013594 EW013600
GAO	(2)	EW013596 EW013597
*GAS MEASUREMENT	(1)	EW013690
*GAS TRANSFER	(1)	EW013690
*GAUGES	(1)	EW013712
*GEORGIA	(1)	EW013625
*GIARDIA	(2)	EW013518 EW013521
*GOVERNMENTAL ROLE	(1)	EW013596
*GRAINS	(1)	EW013674
GRANT PROGRAMS	(1)	EW009245
GRANTS	(3)	EW013602 EW013603 EW013730
*GRAVITY BELTS	(1)	EW013503
*GRAVITY PRESSURE	(1)	EW013565
*GREAT LAKES	(1)	EW013502
*GREY WATER SYSTEMS	(1)	EW013774
GREYWATER SYSTEMS	(1)	EW013775
*GROUNDWATER	(9)	EW013516 EW013622 EW013642 EW013686 EW013691 EW013701 EW013702 EW013731 EW013732

GROUNDWATER	(2)	EW013668	EW013700
*GROUNDWATER RECHARGE BASINS	(1)	EW013733	
*GROUP DEVELOPMENT	(1)	EW013559	
*GROUTING	(1)	EW013634	
*GUIDELINES	(3)	EW013621	EW013706
		EW013726	
*HAWAII	(1)	EW013648	
 *HAZARDOUS MATERIALS	(4)	EW013394	EW013520
*HAZARDOUS SUBSTANCES	(1)	EW013654	
*HAZARDOUS WASTES	(1)	EW013595	EW013596
	EW013744	EW013597	EW013602
HAZARDOUS WASTES	(1)	EW013603	EW013628
		EW013686	
*HAZARDOUS WASTE SITES	(2)	EW013595	EW013596
*HEALTH	(1)	EW013577	
*HEALTH EFFECTS	(4)	EW013525	EW013528
		EW013671	EW013699
*HEAVY METALS	(4)	EW013563	EW013683
		EW013693	EW013696
*HERBICIDES	(1)	EW013638	
*HIGHWAYS	(1)	EW013725	
*HOT WATER HEATERS	(1)	EW013512	
*HUMANS	(1)	EW013698	
*HYDROCARBONS	(1)	EW013693	
*HYDROGEOLOGIC SETTINGS	(1)	EW013516	
*HYDROLOGY	(1)	EW013670	
*ILLINOIS	(2)	EW013634	EW013641
*IMAGE INDICATORS	(1)	EW013639	
INCINERATION	(1)	EW013561	
*INCINERATORS	(1)	EW013772	
*INDONESIA	(1)	EW010821	
*INDUSTRIAL WASTES	(19)	EW012962	EW013506
	EW013675	EW013676	EW013515
	EW013683	EW013684	EW013678
		EW013685	EW013679
		EW013686	EW013680
		EW013681	EW013673
		EW013682	EW013674
INDUSTRIAL WASTES	(2)	EW013661	EW013694
*INDUSTRY	(1)	EW013668	
INDUSTRY	(1)	EW013554	

*INFILTRATION	(2)	EW013634	EW013720					
*INFLOW	(1)	EW013634						
*INFORMATION SYSTEMS	(1)	EW013595						
*INFRARED SPECTROMETRY	(1)	EW013715						
*INORGANIC CHEMICALS	(1)	EW013751						
*INORGANIC COMPOUNDS	(2)	EW013655	EW013666					
*INSECTS	(1)	EW012175						
*INSPECTION	(1)	EW013749						
INSPECTION	(1)	EW009245						
*INSTALLATION	(2)	EW013620	EW013701					
*INSTRUCTION	(4)	EW013631	EW013704	EW013705	EW013709			
INSTRUCTION	(2)	EW013630	EW013744					
*INSTRUCTIONAL MATERIALS	(6)	EW009245	EW013394	EW013560	EW013632	EW013743	EW013745	
INSTRUCTIONAL TECHNOLOGY	(1)	EW013630						
*INSTRUMENTATION	(6)	EW013611	EW013658	EW013667	EW013714	EW013715	EW013716	
INSTRUMENTATION	(1)	EW013661						
*INSTRUMENTS	(2)	EW013701	EW013702					
*INSURANCE COMPANIES	(1)	EW013575						
*INTERACTIVE VIDEO INSTRUCTION	(1)	EW013705						
*INTERFORMAT EDITING	(1)	EW013646						
*INTERSTATE COMMISSIONS	(1)	EW013573						
*INVERTEBRATES	(2)	EW013694	EW013734					
*ION EXCHANGE	(1)	EW013520						
ION EXCHANGE	(1)	EW013660						
IRRIGATION	(1)	EW013668						
*LABORATORY PROCEDURES	(9)	EW013385	EW013514	EW013515	EW013586	EW013655	EW013689	EW013714
	EW013715	EW013716						
*LABORATORY TESTS	(1)	EW013555						
*LAGOONS	(2)	EW013663	EW013717					
*LAKES	(3)	EW013600	EW013688	EW013689				
*LAND APPLICATION	(2)	EW013669	EW013671					
LAND APPLICATION	(1)	EW013561						

*LANDFILLS	(2)	EW012371	EW013517						
LAND USE	(2)	EW013602	EW013603						
*LEADERSHIP	(2)	EW013558	EW013559						
*LEADERSHIP STYLE	(1)	EW013559							
*LEAK DETECTION	(2)	EW013572	EW013700						
*LEAKS	(1)	EW013619							
*LEARNING	(1)	EW013556							
*LEGAL ASPECTS	(1)	EW013654							
*LEGAL RESPONSIBILITIES	(1)	EW013575							
*LEGIONELLA PNEUMOPHILA	(1)	EW013512							
*LEGISLATION	(3)	EW013654	EW013729	EW013732					
LEGISLATION	(1)	EW013755							
*LIABILITIES	(1)	EW013596							
*LIGHTING	(1)	EW013764							
*LINER PLACEMENT	(1)	EW013517							
*LINERS	(1)	EW013517							
*LINING MATERIALS	(1)	EW013517							
*LITERATURE	(1)	EW013652							
*LITERATURE REVIEWS	(48)	EW013576	EW013577	EW013653	EW013654	EW013655	EW013656	EW013657	
	EW013659	EW013660	EW013661	EW013662	EW013663	EW013664	EW013665	EW013666	
	EW013667	EW013668	EW013669	EW013670	EW013671	EW013673	EW013674	EW013675	
	EW013676	EW013677	EW013678	EW013679	EW013680	EW013681	EW013682	EW013683	
	EW013684	EW013685	EW013686	EW013687	EW013688	EW013690	EW013691	EW013692	
	EW013693	EW013694	EW013695	EW013696	EW013697	EW013698	EW013699	EW013715	
	EW013716	EW013716							
LOANS	(1)	EW013730							
*MAINTENANCE	(13)	EW009245	EW013620	EW013621	EW013634	EW013638	EW013659	EW013667	
	EW013700	EW013701	EW013712	EW013720	EW013749	EW013772			
*MALAWI	(1)	EW010821							
*MANAGEMENT	(36)	EW013394	EW013506	EW013556	EW013557	EW013558	EW013559	EW013562	
	EW013573	EW013582	EW013585	EW013586	EW013595	EW013596	EW013621	EW013639	
	EW013640	EW013641	EW013642	EW013648	EW013650	EW013653	EW013670	EW013676	
	EW013677	EW013679	EW013687	EW013689	EW013691	EW013706	EW013709	EW013726	
	EW013731	EW013742	EW013744	EW013748	EW013753				
*MANAGERS	(2)	EW013556	EW013707						
*MANHOLE COVERS	(1)	EW013720							
*MANHOLES	(1)	EW013720							
*MAPS	(2)	EW013516	EW013623						

*MARINE BIOLOGY	(2)	EW013608	EW013612					
*MARINE ENVIRONMENTS	(1)	EW013695						
*MARYLAND	(2)	EW013723	EW013747					
MASSACHUSETTS	(1)	EW013744						
*MATERIAL BALANCE	(1)	EW013758						
*MATERIAL DEVELOPMENT	(2)	EW013560	EW013743					
*MEASUREMENT	(1)	EW013702						
*MEASUREMENT INSTRUMENTS	(1)	EW013702						
*MEAT	(1)	EW013673						
*MEDITERRANEAN SEA	(1)	EW013610						
MEMBRANE PROCESSES	(1)	EW013660						
*MEMBRANES	(1)	EW013554						
*MEMBRANE SEPARATION	(1)	EW013520						
*MEMBRANE TECHNOLOGY	(1)	EW013554						
*METAL INDUSTRY	(1)	EW013520						
*METALS	(6)	EW013568	EW013610	EW013612	EW013655	EW013683	EW013751	
METALS	(1)	EW013520						
*METER LOSSES	(1)	EW013581						
*METER READING	(1)	EW013567						
*METERS	(1)	EW013619						
*METHANE	(1)	EW013735						
*METHANE PRODUCTION	(1)	EW013735						
*METRIC SYSTEM	(1)	EW013623						
*MICHIGAN	(1)	EW013742						
*MICROBIOLOGY	(7)	EW012371	EW013608	EW013610	EW013627	EW013666	EW013695	EW013699
MICROBIOLOGY	(1)	EW013664						
*MICROFAUNA	(1)	EW013697						
*MICROPROCESSORS	(1)	EW013567						
*MICROSCOPY	(1)	EW013716						
*MINING	(1)	EW010080						
*MISSISSIPPI SOUND	(1)	EW013509						

\*MISSOURI  
 \*MODELING  
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 \*MONITORING  
 MONITORING  
 \*MORALE  
 \*MOTIVATION  
 \*MUNICIPAL WASTES  
 \*NAPHTHALENE  
 \*NATIONAL ACID PRECIPITATION ASSESSMENT  
 PROGRAM  
 \*NEEDS ASSESSMENT  
 NEEDS ASSESSMENT  
 \*NITRIFICATION  
 \*NITROGEN  
 NITROGEN  
 \*NONPOINT POLLUTION  
 NONPOINT POLLUTION  
 \*NONPOINT SOURCE POLLUTION  
 \*NUCLEAR POWER  
 \*NUTRIENTS  
 \*OBJECTIVES  
 \*OCEANOGRAPHY  
 \*OCEANS  
 ODOR  
 \*OHIO  
 \*OIL  
 \*OIL DRILLING  
 \*OIL REFINERIES

(1) EW013565  
 (4) EW013667 EW013687 EW013690 EW013696  
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ONSITE DISPOSAL (1) EW013773

\*ONSITE WASTEWATER TREATMENT (3) EW013773 EW013774 EW013775

OPERATIONS (WASTE) (1) EW013744

\*OPERATIONS (WASTE DISPOSAL) (1) EW013700

\*OPERATIONS (WASTES) (1) EW013520

\*OPERATIONS (WASTEWATER) (48) EW009245 EW012962 EW013519 EW013520 EW013554 EW013561 EW013562  
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 EW013777

OPERATIONS (WASTEWATER) (3) EW013640 EW013663 EW013743

\*OPERATIONS (WATER) (17) EW013513 EW013518 EW013521 EW013563 EW013566 EW013569 EW013570  
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 EW013734 EW013747

OPERATIONS (WATER) (4) EW013640 EW013727 EW013731 EW013743

\*OPERATORS (1) EW013584

\*OPINIONS (1) EW013729

\*OREGON (1) EW013753

\*ORGANIC CARBON (1) EW013608

\*ORGANIC CHEMICALS (2) EW013580 EW013727

\*ORGANIC COMPOUNDS (5) EW013656 EW013666 EW013693 EW013696 EW013751  
 (1) EW013707

\*ORGANIZATIONAL DEVELOPMENT (1) EW013707

\*OXIDATION PONDS (1) EW013663

OXIDATIVE PROCESSES (1) EW013660

\*OXYGEN DEMAND (1) EW013726

OXYGEN UPTAKE (1) EW013661

\*OZONE (2) EW013566 EW013569

\*PAPER INDUSTRY (1) EW013679

\*PARTICIPATION (1) EW013557

\*PATHOGENS (1) EW013699

\*PCB'S (1) EW013612

\*PCBS (1) EW013628

*PELAGIC ORGANISMS	(1)	EW013610
*PERFORMANCE BONDS	(1)	EW013575
*PERFORMANCE EVALUATION	(20)	EW010821 EW013519 EW013571 EW013576 EW013584 EW013594 EW013595
	EW013608	EW013624 EW013625 EW013631 EW013663 EW013672 EW013724 EW013772
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PERFORMANCE EVALUATION	(1)	EW013664
PERMITS	(1)	EW013564
*PERSONNEL	(4)	EW013584 EW013630 EW013728 EW013742
*PERSONNEL SHORTAGES	(1)	EW013594
*PERU	(1)	EW010821
*PEST CONTROL	(1)	EW012175
*PESTICIDE APPLICATORS	(1)	EW013604
*PESTICIDES	(5)	EW013514 EW013604 EW013656 EW013693 EW013695
*PETROLEUM	(2)	EW013626 EW013681
*PH	(1)	EW013702
*PHENOLS	(1)	EW013515
*PHOSPHORUS	(4)	EW013502 EW013723 EW013724 EW013725
*PHOSPHORUS REMOVAL	(1)	EW013724
*PHOSTRIP	(1)	EW013724
*PHOTOGRAPHIC PRINTS	(1)	EW013722
*PHOTOGRAPHY	(2)	EW013722 EW013764
*PHYSICAL CHARACTERISTICS	(2)	EW013607 EW013611
*PHYSICAL TREATMENT	(1)	EW013660
*PILOT STUDIES	(3)	EW013513 EW013625 EW013756
*PIPES	(2)	EW013570 EW013620
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*PLANS	(1)	EW013706
*PLANTS	(1)	EW013694
*PLASTIC MEDIA	(1)	EW013625
*POLICIES	(2)	EW013574 EW013653
POLICIES	(1)	EW013755
*POLLUTANTS	(3)	EW013606 EW013612 EW013622

*POLLUTION CONTROL	(16)	EW013516	EW013517	EW013525	EW013528	EW013594	EW013595	EW013597
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*POSTPRODUCTION	(2)	EW013644	EW013645					
*POSTSECONDARY EDUCATION	(3)	EW009245	EW013394	EW013744				
*POULTRY	(1)	EW013673						
*POWER INDUSTRY	(1)	EW013682						
*POWER PRODUCTION	(1)	EW013682						
*PRACTITIONERS	(1)	EW013707						
*PRIORITY POLLUTANTS	(2)	EW013515	EW013519					
*PRIVATE OWNERSHIP	(1)	EW013564						
*PRIVATIZATION	(1)	EW013621						
PRIVATIZATION	(1)	EW013730						
*PROCESS CONTROL	(4)	EW013586	EW013627	EW013640	EW013663			
PROCESS CONTROL	(1)	EW013661						
PROCESS DESCRIPTIONS	(1)	EW013664						
*PROCUREMENT	(1)	EW013624						
PROCUREMENT	(1)	EW013564						
*PRODUCTION	(4)	EW013643	EW013644	EW013645	EW013646			
*PROGRAM EVALUATION	(2)	EW013595	EW013597					
*PROJECT MANAGEMENT	(1)	EW010821						
*PROTECTIVE CLOTHING	(1)	EW013385						
*PROTOZOA	(1)	EW013618						
*PUBLIC ATTITUDES	(1)	EW013571						
*PUBLIC HEALTH	(6)	EW013512	EW013570	EW013577	EW013671	EW013698	EW013732	
PUBLIC HEALTH	(3)	EW013602	EW013603	EW013755				
*PUBLIC IMAGE	(1)	EW013639						
*PUBLIC OWNERSHIP	(1)	EW013564						
*PUBLIC POLICY	(1)	EW013653						
*PUBLIC RELATIONS	(2)	EW013574	EW013639					
*PUBLISHING	(1)	EW013745						

*PULP INDUSTRY	(1)	EW013679						
*PUMPS	(4)	EW013636	EW013703	EW013712	EW013750			
*PUMP SELECTION	(1)	EW013636						
*PUMP STATIONS	(1)	EW013750						
*PUMP TEST ANALYSIS	(1)	EW013703						
*RADIOACTIVE MATERIALS	(1)	EW013685						
*RADIOACTIVE WASTES	(1)	EW013685						
RADIOACTIVITY	(1)	EW013685						
RATES	(1)	EW013657						
*RCRA	(1)	EW013728						
*REAERATION	(3)	EW013594	EW013596	EW013597				
*RECOMMENDATIONS	(1)	EW013690						
RECOMMENDATIONS	(2)	EW013502	EW013704					
*RECOMMENDED PRACTICES	(1)	EW013755						
*RECYCLING	(1)	EW013623						
*REGIONALIZATION	(5)	EW013506	EW013564	EW013578	EW013668	EW013671		
*REGIONAL PLANNING	(1)	EW013753						
*REGULATIONS	(1)	EW013642						
REGULATIONS	(11)	EW013502	EW013561	EW013573	EW013507	EW013676	EW013680	EW013683
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*REHABILITATION	(4)	EW013602	EW013603	EW013682	EW013755			
*REMEDIATION	(1)	EW013659						
*REPORTS	(2)	EW013628	EW013629					
*RESEARCH	(1)	EW013509						
RESEARCH	(10)	EW012175	EW013515	EW013600	EW013662	EW013692	EW013693	EW013698
	EW013724	EW013735	EW013755					
*RESEARCH NEEDS	(1)	EW013694						
*RESEARCH REPORTS	(3)	EW013512	EW013517	EW013755				
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	EW013661	EW013663	EW013664	EW013665	EW013666	EW013667	EW013668	EW013669
	EW013670	EW013671	EW013674	EW013675	EW013676	EW013677	EW013678	EW013679
	EW013680	EW013681	EW013682	EW013683	EW013684	EW013685	EW013686	EW013688
	EW013690	EW013691	EW013695	EW013696	EW013697	EW013699	EW013707	
*RESEARCH REVIEWS	(5)	EW013687	EW013692	EW013693	EW013694	EW013698		
*RESEARCH STUDIES	(1)	EW013604						
*RESERVOIRS	(2)	EW013689	EW013690					

*REVENUES	(1)	EW013619
*REVERSE OSMOSIS	(2)	EW013554 EW013718
REVIEW	(1)	EW013652
*RISK ASSESSMENT	(2)	EW013516 EW013774
RISK ASSESSMENT	(1)	EW013685
*RIVERS	(2)	EW013688 EW013726
*ROOTS	(1)	EW013638
*ROTATING BIOLOGICAL CONTACTORS	(2)	EW013626 EW013662
*SAFE DRINKING WATER ACT	(4)	EW013651 EW013727 EW013729 EW013751
*SAFETY	(3)	EW013385 EW013604 EW013659
*SAMPLING	(5)	EW013655 EW013658 EW013691 EW013696 EW013698
SAMPLING	(1)	EW013553
*SAND FILTERS	(1)	EW013635
SAND FILTERS	(1)	EW013775
*SANITATION	(1)	EW010821
*SCADA	(2)	EW013640 EW013648
*SCUM	(1)	EW013746
*SEDIMENTS	(1)	EW013696
*SEPARATION PROCESSES	(1)	EW013554
*SERVIC TANKS	(1)	EW013774
*SERVING LATERALS	(1)	EW013634
*SEWERS	(5)	EW013634 EW013638 EW013659 EW013670 EW013720
*SEWER SYSTEMS	(1)	EW013582
*SIMULATIONS	(1)	EW013650
*SITE CLOSURE	(1)	EW013596
*SITE SELECTION	(1)	EW013672
SLIDES	(1)	EW009245
*SLUDGE	(7)	EW012371 EW012962 EW013561 EW013583 EW013627 EW013671 EW013683
SLUDGE	(3)	EW013713 EW013757 EW013772
SLUDGE BLANKETS	(1)	EW013713

*SLUDGE DEWATERING	(1)	EW013757
*SLUDGE DISPOSAL	(1)	EW013561
*SLUDGE INCINERATORS	(1)	EW013772
*SLUDGE STABILIZATION	(2)	EW013624 EW013665
*SLUDGE TREATMENT	(1)	EW013665
*SLUDGE UTILIZATION	(1)	EW013665
*SOIL ABSORPTION	(1)	EW013773
*SOILS	(1)	EW013629
SOILS	(1)	EW013773
SOLIDS SEPARATION	(1)	EW013660
*SOLID WASTES	(4)	EW013597 EW013602 EW013603 EW013686
*SPECTROMETRY	(1)	EW013715
*SPILLS	(1)	EW013553
*SPREADSHEETS	(1)	EW013585
*STAFF DEVELOPMENT	(2)	EW013630 EW013742
*STANDARDS	(3)	EW013563 EW013581 EW013651
*STANDARD UNITS	(1)	EW013623
*STATE-OF-THE-ART REVIEWS	(1)	EW013652
*STATE ROLE	(1)	EW013573
*STORAGE	(2)	EW013394 EW013685
STORAGE	(1)	EW013680
*STORMWATER	(3)	EW013565 EW013582 EW013670
*STREAMS	(2)	EW013600 EW013690
*SUBMERSIBLE PUMPS	(1)	EW013750
*SUPERFUND	(2)	EW013594 EW013595
*SUPERVISION	(2)	EW013640 EW013648
*SURFACE IMPOUNDMENTS	(1)	EW013517
*SURFACE RUNOFF	(4)	EW013582 EW013670 EW013725 EW013733
*SURFACE WATER	(1)	EW013622
*SURVEILLANCE	(1)	EW013502
*SURVEYS	(5)	EW013571 EW013604 EW013630 EW013639 EW013728
*SYNTHETIC FUELS	(1)	EW013681

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*SYSTEM DEVELOPMENT	(1)	EW013516	88
*SYSTEMS ANALYSIS	(1)	EW013652	
*TANZANIA	(1)	EW010821	
*TAP WATER	(1)	EW013571	
*TECHNICAL PHOTOGRAPHY	(2)	EW013722 EW013764	
*TECHNOLOGICAL ADVANCEMENTS	(1)	EW013667	
*TECHNOLOGY	(9)	EW013520 EW013564 EW013581 EW013635 EW013640 EW013660 EW013735	
TECHNOLOGY	(9)	EW013754 EW013775	
(3)	EW013561 EW013633 EW013668		
*TELEVISION	(1)	EW013749	
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*TEMPERATURE	(1)	EW013607	
*TENSIOMETERS	(1)	EW013701	
*TERMINALS	(1)	EW013633	
*TERTIARY TREATMENT	(2)	EW012962 EW013719	
*TESTING	(1)	EW013698	
*TEXTILES	(1)	EW013678	
*THERMAL POLLUTION	(1)	EW013692	
*THM	(1)	EW013563	
*TOILETS	(1)	EW013774	
*TOUCH-SENSITIVE TECHNOLOGY	(1)	EW013633	
*TOXIC SUBSTANCES	(9)	EW013502 EW013525 EW013528 EW013553 EW013577 EW013597 EW013602	
EW013603	EW013629		
*TRACE METALS	(2)	EW013610 EW013655	
*TRAINERS	(1)	EW013704	
*TRAINING	(8)	EW013558 EW013560 EW013630 EW013631 EW013704 EW013705 EW013708	
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*TRAINING MATERIALS	(1)	EW013560	
*TRAINING NEEDS ANALYSIS	(1)	EW013708	
*TRANSMISSION	(1)	EW013643	
TRANSPORTATION	(2)	EW013680 EW013685	
*TRENDS	(3)	EW013622 EW013730 EW013755	
TRENDS	(1)	EW013720	
*TRICKLING FILTERS	(3)	EW013625 EW013662 EW013756	

*TRIHALMOTHANES	(1)	EW013563
*TROUBLE SHOOTING	(1)	EW013746
*TROUBLESHOOTING	(2)	EW013776 EW013777
*TSCA	(1)	EW013597
*ULTRAVIOLET RADIATION	(1)	EW013521
*UNDERGROUND INJECTION WELLS	(1)	EW013700
*UNITED NATIONS	(1)	EW013609
*URBAN AREAS	(2)	EW013670 EW013733
*USAID	(1)	EW010821
*USEPA	(8)	EW013587 EW013594 EW013595 EW013596 EW013597 EW013602 EW013603
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*UTAH	(1)	EW013619
*UTILITIES	(1)	EW013639
*VALUES	(1)	EW013707
*VEGETABLES	(1)	EW013674
*VERTEBRATES	(1)	EW013694
*VIDEODISCS	(2)	EW013643 EW013644
*VIDEOTAPES	(7)	EW013602 EW013603 EW013643 EW013644 EW013645 EW013646 EW013647
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*VIDEO TRAINING	(1)	EW013705
*VIRUSES	(1)	EW013699
*VOLATILE ORGANIC COMPOUNDS	(1)	EW013580
*WASHINGTON	(2)	EW013513 EW013731
*WASHINGTON D. C.	(1)	EW013649
*WASTE	(1)	EW013679
*WASTE DISPOSAL	(26)	EW010821 EW013394 EW013506 EW013564 EW013596 EW013665 EW013671
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*WASTE HANDLING	(1)	EW013744
*WASTE MANAGEMENT	(2)	EW013685 EW013686
*WASTE RECOVERY	(3)	EW013506 EW013675 EW013678
WASTES	(1)	EW013629
*WASTE TREATMENT	(6)	EW013506 EW013520 EW013677 EW013682 EW013686 EW013744

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\*WASTEWATER  
\*WASTEWATER COLLECTION (5) EW013514 EW013515 EW013656 EW013658 EW013690  
(8) EW013565 EW013582 EW013634 EW013638 EW013659 EW013678 EW013712  
EW013728

\*WASTEWATER RECOVERY (1) EW013675

\*WASTEWATER RECYCLING (1) EW013675

\*WASTEWATER REUSE (1) EW013675

\*WASTEWATER TREATMENT (73) EW009245 EW012971 EW012962 EW013519 EW013520 EW013554 EW013561  
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EW013776 EW013777

WASTEWATER TREATMENT (4) EW013640 EW013652 EW013670 EW013743

\*WATER (1) EW013656

\*WATER CHARACTERISTICS (1) EW013657

\*WATER CONSERVATION (1) EW013573

\*WATER CONSUMPTION (1) EW013649

\*WATER DISTRIBUTION (9) EW013513 EW013570 EW013619 EW013620 EW013641 EW013648 EW013649  
EW013650 EW013734

\*WATER METERS (3) EW013567 EW013581 EW013619

\*WATER PIPES (2) EW013570 EW013620

\*WATER POLLUTION (7) EW013687 EW013688 EW013694 EW013695 EW013696 EW013697 EW013699

\*WATER POLLUTION CONTROL (14) EW013502 EW013509 EW013580 EW013597 EW013602 EW013603 EW013622  
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WATER POLLUTION CONTROL (1) EW013755

\*WATER QUALITY (35) EW010821 EW013502 EW013509 EW013512 EW013516 EW013518 EW013608  
EW013609 EW013642 EW013652 EW013653 EW013654 EW013655 EW013657 EW013558  
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EW013691 EW013692 EW013694 EW013695 EW013696 EW013697 EW013699 EW013713  
EW013723 EW013727 EW013729 EW013754

WATER QUALITY (2) EW013700 EW013728

\*WATER QUALITY CONTROL BOARD (1) EW013642

\*WATER RATES (1) EW013581

WATER RATES (1) EW013567

\*WATER RECLAMATION (1) EW013668

\*WATER RESOURCES (11) EW013573 EW013642 EW013652 EW013653 EW013668 EW013691 EW013701  
EW013723 EW013731 EW013732 EW013733

\*WATER REUSE  
\*WATER SUPPLY (3) EW013578 EW013668 EW013754  
(11) EW010821 EW013512 EW013573 EW013581 EW013650 EW013656 EW013731  
EW013732 EW013733 EW013747 EW013749  
WATER SUPPLY (1) EW013567  
\*WATER SUPPLY SIMULATION MODELS (1) EW013650  
\*WATER TREATMENT (27) EW010821 EW013513 EW013518 EW013521 EW013563 EW013566 EW013569  
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WATER TREATMENT (3) EW013640 EW013731 EW013743  
\*WATER UTILITIES (3) EW013571 EW013572 EW013574  
\*WATER WELLS (1) EW013749  
\*WELLS (3) EW013700 EW013703 EW013749  
\*WISCONSIN (1) EW013732  
\*WORLD CLIMATE RESEARCH PROGRAM (1) EW013611  
\*WYOMING (1) EW013717  
\*XYLENE (1) EW013525  
\*1, 1-DICHLOROETHANE (1) EW013528  
\*1986 (1) EW013651  
\*4,6-DINITRO-0-CRESOL (1) EW013519

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